

## Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.



AXS11  
Ag83E  
cap. 3

# DEVELOPMENTS IN MARKETING SPREADS FOR AGRICULTURAL PRODUCTS IN

1964

U.S. DEPT. OF AGRICULTURE  
MAR 29 1964  
LIBRARY

Economic Research Service  
U. S. Department of Agriculture

(Reprinted from Hearings Before the Subcommittee  
of the Committee on Appropriations, United States  
House of Representatives, Eighty-Ninth Congress,  
First Session)

2



# CONTENTS

	<u>Page</u>
Highlights . . . . .	1
Food marketing costs . . . . .	1
Special studies of marketing spreads and costs. . . . .	11
Variations in retail prices of food--frying chickens as an example . . . . .	12
Beef. . . . .	15
Chickens and eggs. . . . .	17
Fluid milk . . . . .	18
Bread . . . . .	20
Frozen orange juice concentrate . . . . .	21
Potatoes . . . . .	22
Sugar . . . . .	24
Marketing bill for cigarettes . . . . .	25
Cotton and wool . . . . .	27
Margins and costs publications issued, February 1964--February 1965 . . . . .	29
Publications of the Economic Research Service, USDA . . . . .	29
State Publications . . . . .	30
Articles in USDA periodicals . . . . .	30
Other dissemination of price spread information, February 1964--	
February 1965. . . . .	30
Speeches and papers . . . . .	30
Periodicals . . . . .	31
Radio presentations . . . . .	31
Television . . . . .	31
Exhibits . . . . .	31

August 1965

## PREFACE

The Congress in 1955 directed the Department of Agriculture to make special studies of spreads between prices paid by consumers and those received by farmers. The reports published in 1964 and early 1965 are summarized in this report, which was prepared for the Subcommittees of the Committees on Appropriations of the House of Representatives and of the United States Senate.

Eight similar reports summarize the results of earlier studies: Special Margins and Costs Studies, Marketing Research Report No. 187, April 1957; Special Studies of Marketing Costs and Practices, Marketing Research Report No. 240, October 1958; Developments in Marketing Spreads for Agricultural Products in 1958, AMS-316, June 1959; Developments in Marketing Spreads for Agricultural Products in 1959, AMS-374, May 1960; Developments in Marketing Spreads for Agricultural Products in 1960, ERS-14(1961), July 1961; Developments in Marketing Spreads for Agricultural Products in 1961, ERS-14(1962), October 1962; Developments in Marketing Spreads for Agricultural Products in 1962, ERS-14(1963), August 1963; Developments in Marketing Spreads for Agricultural Products in 1963, ERS-14(1964), August 1964.

## DEVELOPMENTS IN MARKETING SPREADS FOR AGRICULTURAL PRODUCTS IN 1964

### HIGHLIGHTS

1. The spread between the retail cost and farm value of foods in the market basket of farm-originated foods increased less than 0.5 percent last year (tables 1-3 and figure 1). This was the smallest annual rise since 1960. The small increase in 1964 reflected stability in prices of goods (not including raw materials) and services used by marketing firms (pp. 1-11 ).
2. Retail prices of farm foods averaged less than 0.5 percent higher in 1964 than the year before. This was the smallest annual gain since 1959, the last year retail prices decreased.
3. Prices farmers received for food products last year averaged about the same as in 1963. Also, their share of the retail food dollar, at 37 cents, stayed the same (figure 2).
4. Consumers spent 18.5 percent of their disposable income for food last year, compared with 18.9 percent in 1963, although per capita expenditures for food kept rising. The proportion of disposable income spent for food has declined in all but 2 years since 1947, when it was 26.9 percent.
5. The spread between retail prices and farm values of Choice beef increased to a record annual average of 35.4 cents per retail pound in 1964, 1.0 cent more than the average for 1963. Retail prices of Choice beef averaged 77.8 cents per pound last year, 3.2 cents lower than in 1963. The farm value averaged 42.4 cents, down 4.2 cents from the 1963 average. These changes accompanied an increase of 12 percent in beef production.
6. Retail prices of cotton clothing and housefurnishings averaged about the same in 1964 as the year before, but prices farmers received for lint cotton used in making these goods declined 1 cent per pound. The marketing spread was 1 cent larger in 1964, excluding the Federal equalization payment of 6.5 cents to domestic users of eligible raw U. S. cotton.
7. Consumer expenditures for cigarettes increased in 1963 (the latest data available) as a result of increased consumption and a rise in retail prices. However, returns to farmers from the tobacco in these cigarettes declined slightly because of lower prices for leaf tobacco.

### FOOD MARKETING COSTS

Marketing spreads for farm-originated food products averaged about the same last year as in 1963. This stability was accompanied by generally minor changes in prices of goods and services used by food marketing firms. Further, many firms have made technological and managerial improvements to offset price increases for items used in marketing.

Labor costs and output per man-hour.--Hourly earnings of employees of food marketing firms averaged \$2.25 per hour last year, up 8 cents from 1963. This increase of 8 cents was 1 cent more than that in each of the 3 preceding years and compares with a 1954-63 annual average rise of 7.1 cents per hour.



Table 1.--The farm food market basket: Retail cost, farm value, farm-retail spread, and farmer's share of retail cost, 1954-64 <sup>1/</sup>

Year and month	Retail cost	Farm value	Farm-retail	Farmer's
	:	2/	:	share
	Dollars	Dollars	Dollars	Percent
1954 .....	933	398	535	43
1955 .....	917	373	544	41
1956 .....	920	369	551	40
1957 .....	953	380	573	40
1958 .....	1,009	407	602	40
1959 .....	985	377	608	38
1957-59 average .....	983	388	595	39
1960 .....	991	383	608	39
1961 .....	997	380	617	38
1962 .....	1,006	384	622	38
1963 .....	1,013	374	639	37
1964 <sup>3/</sup> .....	1,015	373	642	37
<u>1963</u>				
January .....	1,016	386	630	38
February .....	1,020	380	640	37
March .....	1,013	370	643	37
April .....	1,004	374	630	37
May .....	1,002	366	636	37
June .....	1,007	372	635	37
July .....	1,021	385	636	38
August .....	1,023	377	646	37
September .....	1,018	376	642	37
October .....	1,012	375	637	37
November .....	1,011	372	639	37
December .....	1,010	359	651	36
<u>1964 <sup>3/</sup></u>				
January .....	1,014	375	639	37
February .....	1,012	368	644	36
March .....	1,006	370	636	37
April .....	1,004	361	643	36
May .....	1,000	359	641	36
June .....	1,008	360	648	36
July .....	1,023	381	642	37
August .....	1,021	382	639	37
September .....	1,028	387	641	38
October .....	1,022	380	642	37
November .....	1,018	378	640	37
December .....	1,020	375	645	37

<sup>1/</sup> Retail cost of average quantities purchased annually per household in 1960-61 by urban wage-earner and clerical-worker families and single workers living alone, calculated from retail prices collected by the Bureau of Labor Statistics.

<sup>2/</sup> Payment to farmers for equivalent quantities of farm products minus imputed value of byproducts obtained in processing.

<sup>3/</sup> Preliminary estimates.

Current data are given in the Marketing and Transportation Situation,	:
a quarterly publication of the Economic Research Service,	:
and in the Statistical Summary, a monthly publication of the	:
Statistical Reporting Service	:



Table 2.--Farm food products: Retail cost, farm value of equivalent quantities sold by producers, byproduct allowance, farm-retail spread, and farmer's share of retail cost, annual 1963

Product 1/	Farm equivalent	Retail unit	Retail cost	Gross farm value	Byproduct allowance	Net farm value 2/	Farm-retail spread	Farmer's share
			Dollars	Dollars	Dollars	Dollars	Dollars	Percent
Market basket .....			1,012.90	---	---	374.44	638.46	37
Meat products .....			286.35	---	---	143.06	143.29	50
Dairy products .....			178.14	---	---	77.43	100.71	43
Poultry and eggs .....		Average quantities purchased per urban wage-earner and clerical-worker household in 1960-61	86.09	---	---	48.84	37.25	57
Bakery and cereal products	Farm produce equivalent to products bought per urban wage-earner and clerical-worker household in 1960-61							
All ingredients .....			159.03	---	---	32.00	127.03	20
Grain 3/ .....			---	29.52	4.94	24.58	---	15
All fruits and vegetables .....			222.16	---	---	54.62	167.54	25
Fresh fruits and vegetables ....			103.19	---	---	32.78	70.41	32
Fresh fruits .....			44.68	---	---	16.00	28.68	36
Fresh vegetables .....			58.51	---	---	16.78	41.73	29
Processed fruits and vegetables .....			118.97	---	---	21.84	97.13	18
Fats and oils .....			35.14	---	---	10.41	24.73	30
Miscellaneous products .....			45.99	---	---	8.08	37.91	18
			Cents	Cents	Cents	Cents	Cents	Percent
Beef, Choice grade .....	2.25 lb. Choice grade cattle	Pound	81.0	51.1	4.5	46.6	34.4	58
Lamb, Choice grade .....	2.35 lb. lamb	Pound	71.3	42.9	6.3	36.6	34.7	51
Pork .....	2.00 lb. hogs	Pound	57.3	30.5	3.4	27.1	30.2	47
Butter .....	Cream and whole milk	Pound	73.6	---	---	52.2	21.4	71
Cheese, American process .....	Milk for American cheese	$\frac{1}{2}$ pound	35.7	---	---	14.8	20.9	41
Ice cream .....	Cream, milk, and sugar	$\frac{1}{2}$ gallon	81.8	---	---	24.0	57.8	29
Milk, evaporated .....	Milk for evaporating	$1\frac{1}{2}$ -ounce can	14.9	---	---	6.2	8.7	42
Milk, fresh								
Home delivered .....	4.39 lb. Class I milk	$\frac{1}{2}$ gallon	52.4	---	---	21.5	30.9	41
Sold in stores .....	4.39 lb. Class I milk	$\frac{1}{2}$ gallon	47.6	---	---	21.5	26.1	45
Chickens, frying, ready-to-cook ....	1.37 lb. broiler	Pound	38.8	---	---	19.9	18.9	51
Eggs, Grade A large .....	1.03 dozen	Dozen	54.4	---	---	33.4	21.0	61
Bread, white								
All ingredients .....	Wheat and other ingredients	Pound	20.7	---	---	3.1	17.6	15
Wheat .....	.877 lb. wheat	Pound	---	2.9	.4	2.5	---	12
Bread, whole or cracked wheat .....	Wheat and other ingredients	Pound	---	---	---	---	---	---
Cookies, sandwich .....	Wheat and other ingredients	Pound	51.3	---	---	4.2	47.1	8
Corn flakes .....	2.87 lb. yellow corn	12 ounces	28.0	5.8	3.2	2.6	25.4	9
Flour, white .....	6.8 lb. wheat	5 pounds	55.5	22.3	2.6	19.7	35.8	36
Apples .....	1.04 lb. apples	Pound	17.8	---	---	5.7	12.1	32
Grapefruit .....	1.03 grapefruit	Each	14.7	---	---	4.1	10.6	28
Lemons .....	1.04 lb. lemons	Pound	22.9	---	---	6.0	16.9	26
Oranges .....	1.03 doz. oranges	Dozen	89.3	---	---	32.1	57.2	36
Cabbage .....	1.08 lb. cabbage	Pound	10.2	---	---	2.6	7.6	25
Carrots .....	1.03 lb. carrots	Pound	14.6	---	---	3.2	11.4	22
Celery .....	1.08 lb. celery	Pound	14.2	---	---	3.8	10.4	27
Cucumbers .....	1.09 lb. cucumbers	Pound	---	---	---	---	---	---
Lettuce .....	1.88 lb. lettuce	Head	24.9	---	---	7.8	17.1	31
Onions .....	1.06 lb. onions	Pound	11.2	---	---	3.5	7.7	32
Peppers, green .....	1.09 lb. peppers	Pound	---	---	---	---	---	---
Potatoes .....	10.42 lb. potatoes	10 pounds	62.3	---	---	17.0	45.3	27
Spinach .....	.71 lb. spinach	10 ounces	---	---	---	---	---	---
Tomatoes .....	1.18 lb. tomatoes	Pound	31.9	---	---	10.4	21.5	33
Peaches, canned .....	1.60 lb. Calif. cling peaches	No. 2 $\frac{1}{2}$ can	32.3	---	---	5.1	27.2	16
Pears, canned .....	1.85 lb. pears for canning	No. 2 $\frac{1}{2}$ can	---	---	---	---	---	---
Beets, canned .....	1.24 lb. beets for canning	No. 303 can	---	---	---	---	---	---
Corn, canned .....	2.495 lb. sweet corn	No. 303 can	19.0	---	---	2.4	16.6	13
Peas, canned .....	.69 lb. peas for canning	No. 303 can	22.6	---	---	2.9	19.7	13
Tomatoes, canned .....	1.84 lb. tomatoes for canning	No. 303 can	15.3	---	---	2.6	12.7	17
Orange juice, concentrate, frozen ..	3.68 lb. oranges	6-ounce can	30.1	---	---	10.3	19.8	34
French fried potatoes, frozen .....	1.38 lb. potatoes	9 ounces	---	---	---	---	---	---
Peas, frozen .....	.70 lb. peas for freezing	10 ounces	21.1	---	---	3.0	18.1	14
Beans, navy .....	1.00 lb. Mich. dry beans	Pound	17.0	---	---	6.4	10.6	38
Margarine .....	Soybeans, cottonseed, and milk	Pound	25.9	---	---	7.1	18.8	27
Peanut butter .....	1.33 lb. peanuts	12-ounce jar	43.4	---	---	15.0	28.4	35
Salad and cooking oil .....	Soybeans, cottonseed, and corn	Pint	---	---	---	---	---	---
Vegetable shortening .....	Soybeans and cottonseed	3 pounds	81.2	---	---	25.3	55.9	31
Sugar .....	Sugar beets and cane	5 pounds	65.8	24.5	1.5	$\frac{1}{2}$ 23.0	$\frac{1}{4}$ 2.8	$\frac{1}{4}$ 35
Spaghetti with sauce, canned .....	Wheat, tomatoes, cheese, sugar	$1\frac{1}{2}$ -ounce can	---	---	---	---	---	---

1/ Product groups include more items than those listed in this table. For example, in addition to the products listed--Choice beef, lamb, and pork (major products except lard)--the meat products group includes lower grades of beef, the minor edible pork products, and veal.

2/ Gross farm value adjusted to exclude imputed values of byproducts obtained in processing.

3/ Estimate of farm value and farmer's share for products including corn and wheat are based on market prices only and do not include Government payments to producers.

4/ Net farm value adjusted for Government payments to producer was 26.8 cents, farm-retail spread adjusted for Government processor tax was 40.1 cents, and farmer's share of retail cost based on adjusted farm value was 41 percent.

Table 3.--Farm food products: Retail cost, farm value of equivalent quantities sold by producers, byproduct allowance, farm-retail spread, and farmer's share of retail cost, annual 1964

Product <sup>1/</sup>	Farm equivalent	Retail unit	Retail cost	Gross farm value	Byproduct allowance	Net farm value <sup>2/</sup>	Farm-retail spread	Farmer's share
			Dollars	Dollars	Dollars	Dollars	Dollars	Percent
Market basket .....			1014.72	---	---	373.08	641.64	37
Meat products .....			280.47	---	---	134.71	145.76	48
Dairy products .....			178.92	---	---	78.64	100.28	44
Poultry and eggs .....		Average quantities	84.51	---	---	47.45	37.06	56
Bakery and cereal products	Farm produce equivalent to products bought per urban wage-earner and clerical-worker household in 1960-61	quantities purchased	---	---	---	---	---	---
All ingredients .....		per urban wage-earner	159.64	---	---	32.27	127.37	20
Grain <sup>3/</sup> .....		and	---	29.45	4.79	24.66	---	15
All fruits and vegetables .....		clerical-worker	229.54	---	---	61.21	168.33	27
Fresh fruits and vegetables .....		household	109.36	---	---	36.17	73.19	33
Fresh fruits .....		in	44.57	---	---	15.09	29.48	34
Fresh vegetables .....		1960-61	64.79	---	---	21.08	43.71	33
Processed fruits and vegetables .....			---	---	---	---	---	---
Fats and oils .....			120.18	---	---	25.04	95.14	21
Miscellaneous products .....			34.77	---	---	10.27	24.50	30
			46.87	---	---	8.53	38.34	18
			Cents	Cents	Cents	Cents	Cents	Percent
Beef, Choice grade .....	2.25 lb. Choice grade cattle	Pound	77.8	46.6	4.2	42.4	35.4	54
Lamb, Choice grade .....	2.35 lb. lamb	Pound	74.0	46.6	7.1	39.5	34.5	53
Pork .....	2.00 lb. hogs	Pound	56.4	30.2	3.6	26.6	29.8	47
Butter .....	Cream and whole milk	Pound	74.4	---	---	53.0	21.4	71
Cheese, American process .....	Milk for American cheese	$\frac{1}{8}$ pound	36.7	---	---	15.1	21.6	41
Ice cream .....	Cream, milk, and sugar	$\frac{1}{8}$ gallon	80.4	---	---	24.6	55.8	31
Milk, evaporated .....	Milk for evaporating	$1\frac{1}{2}$ -ounce can	14.9	---	---	6.4	8.5	43
Milk, fresh								
Home delivered .....	4.39 lb. Class I milk	$\frac{1}{2}$ gallon	52.8	---	---	21.7	31.1	41
Sold in stores .....	4.39 lb. Class I milk	$\frac{1}{2}$ gallon	47.7	---	---	21.7	26.0	45
Chickens, frying, ready-to-cook .....	1.37 lb. broiler	Pound	37.8	---	---	19.5	18.3	58
Eggs, Grade A large .....	1.03 dozen	Dozen	53.9	---	---	32.9	21.0	61
Bread, white								
All ingredients .....	Wheat and other ingredients	Pound	20.7	---	---	3.2	17.5	15
Wheat .....	.877 lb. wheat	Pound	---	2.8	.3	2.5	---	12
Bread, whole or cracked wheat .....	Wheat and other ingredients	Pound	26.3	---	---	2.9	23.4	11
Cookies, sandwich .....	Wheat and other ingredients	Pound	51.0	---	---	4.2	46.8	8
Corn flakes .....	2.87 lb. yellow corn	12 ounces	28.6	4/5.9	4/3.4	4/2.5	26.1	3/9
Flour, white .....	6.8 lb. wheat	5 pounds	56.7	22.2	2.3	19.9	36.8	35
Apples .....	1.04 lb. apples	Pound	17.8	---	---	5.7	12.1	32
Grapefruit .....	1.03 grapefruit	Each	15.6	---	---	4.3	11.3	28
Lemons .....	1.04 lb. lemons	Pound	21.1	---	---	5.3	15.8	25
Oranges .....	1.03 doz. oranges	Dozen	88.1	---	---	28.4	59.7	32
Cabbage .....	1.08 lb. cabbage	Pound	10.3	---	---	2.8	7.5	27
Carrots .....	1.03 lb. carrots	Pound	14.9	---	---	3.4	11.5	23
Celery .....	1.08 lb. celery	Pound	15.7	---	---	4.9	10.8	31
Cucumbers .....	1.09 lb. cucumbers	Pound	23.8	---	---	8.8	15.0	37
Lettuce .....	1.88 lb. lettuce	Head	24.6	---	---	8.4	16.2	34
Onions .....	1.06 lb. onions	Pound	11.2	---	---	3.2	8.0	29
Peppers, green .....	1.09 lb. peppers	Pound	34.7	---	---	11.4	23.3	33
Potatoes .....	10.42 lb. potatoes	10 pounds	75.7	---	---	27.1	48.6	36
Spinach .....	.71 lb. spinach	10 ounces	28.1	---	---	5.5	22.6	20
Tomatoes .....	1.18 lb. tomatoes	Pound	33.2	---	---	11.2	22.0	34
Peaches, canned .....	1.60 lb. Calif. cling peaches	No. 2 $\frac{1}{2}$ can	33.2	---	---	4.7	28.5	14
Pears, canned .....	1.85 lb. pears for canning	No. 2 $\frac{1}{2}$ can	19.2	---	---	9.3	39.9	19
Beets, canned .....	1.24 lb. beets for canning	No. 303 can	16.7	---	---	1.1	15.6	7
Corn, canned .....	2.495 lb. sweet corn	No. 303 can	19.0	---	---	2.4	16.6	13
Peas, canned .....	.69 lb. peas for canning	No. 303 can	22.7	---	---	3.0	19.7	13
Tomatoes, canned .....	1.84 lb. tomatoes for canning	No. 303 can	16.0	---	---	2.6	13.4	16
Orange juice, concentrate, frozen .....	2.74 lb. oranges	6-ounce can	31.0	---	---	14.5	16.5	47
French fried potatoes, frozen .....	1.38 lb. potatoes	9 ounces	16.6	---	---	2.1	14.5	13
Peas, frozen .....	.70 lb. peas for freezing	10 ounces	21.0	---	---	3.2	17.8	15
Beans, navy .....	1.00 lb. Mich. dry beans	Pound	16.7	---	---	6.5	10.2	39
Margarine .....	Soybeans, cottonseed, and milk	Pound	26.0	---	---	7.4	18.6	28
Peanut butter .....	1.33 lb. peanuts	12-ounce jar	43.8	---	---	15.0	28.8	34
Salad and cooking oil .....	Soybeans, cottonseed, and corn	Pint	32.0	---	---	8.0	24.0	25
Vegetable shortening .....	Soybeans and cottonseed	3 pounds	79.0	---	---	26.2	52.8	33
Sugar .....	Sugar beets and cane	5 pounds	64.0	25.4	1.5	5/23.9	5/40.1	5/37
Spaghetti with sauce, canned .....	Wheat, tomatoes, cheese, sugar	$1\frac{1}{2}$ -ounce can	15.1	---	---	1.6	13.5	11

<sup>1/</sup> Product groups include more items than those listed in this table. For example, in addition to the products listed--Choice beef, lamb, and pork (major products except lard)--the meat products group includes lower grades of beef, the minor edible pork products, and veal.

<sup>2/</sup> Gross farm value adjusted to exclude imputed values of byproducts obtained in processing.

<sup>3/</sup> For the bakery and cereal products group and the individual wheat products, gross farm value, byproduct allowance, net farm value, and farmer's share in the second part of year, are based on price of wheat received by farmers plus 70 cents per bushel, the cost of the marketing certificate to millers and the value of the domestic marketing certificate received by farmers complying fully with the 1964 Wheat Program.

<sup>4/</sup> Based on market price of corn received by farmers; no allowance made for price support payment received by farmers who comply with the Federal Feed Grain Program.

<sup>5/</sup> Net farm value adjusted for Government payments to producers was 27.8 cents, farm-retail spread adjusted for Government processor tax was 37.4 cents, and farmer's share of retail cost based on adjusted farm value was 43 percent.

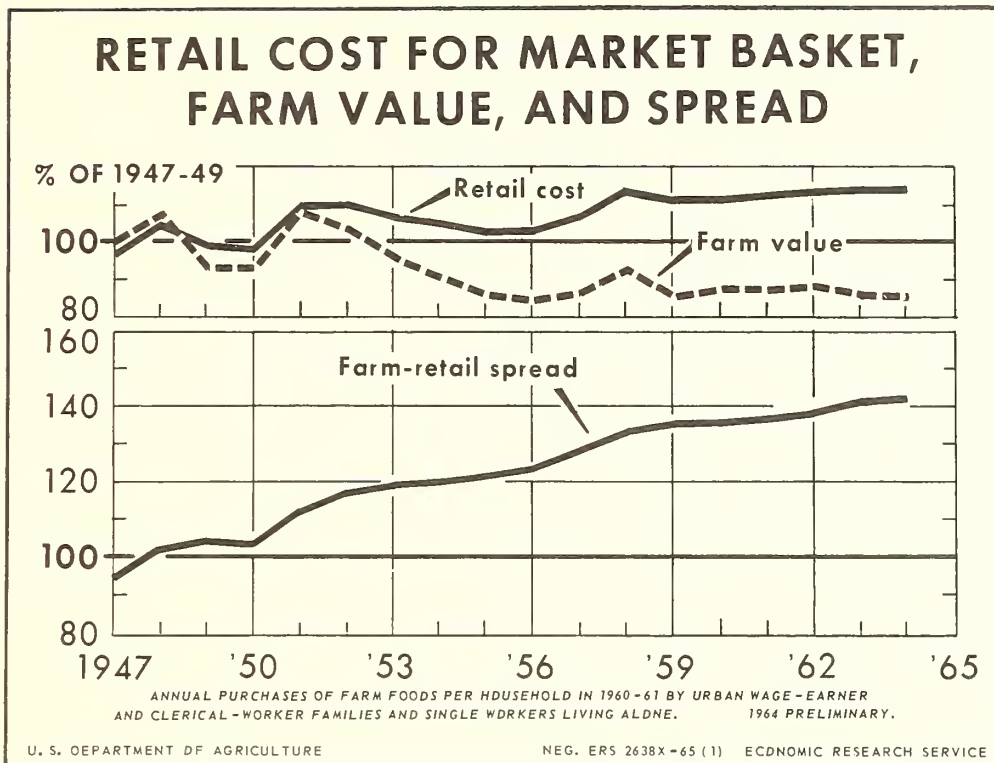


Figure 1

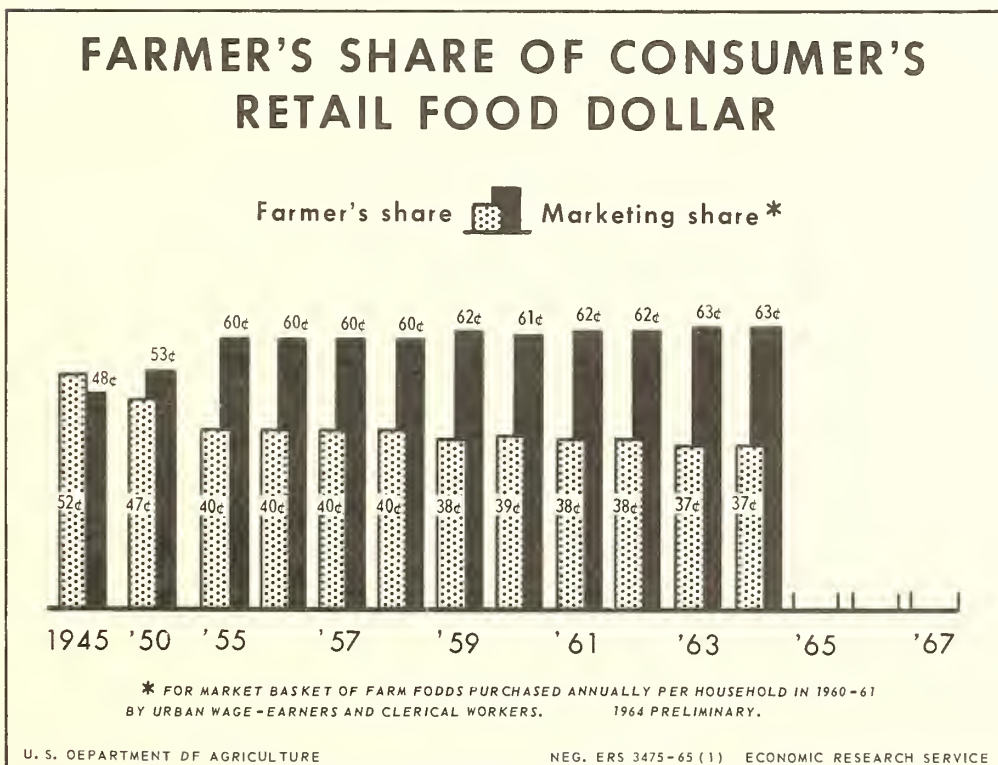


Figure 2

Earnings of workers in plants manufacturing food and kindred products averaged \$2.39 per hour last year, up about 3 percent from a year earlier. Workers in all manufacturing industries averaged \$2.53 per hour in 1964, up about 3 percent. Earnings of employees in retail food stores averaged \$1.97 per hour compared with earnings of \$1.87 for all retail trade. Both averaged about 4 percent higher than in 1963. In the wholesale food trade, employees earned \$2.33 per hour, up about 4 percent. Earnings for all wholesale trade went up 3 percent to \$2.52.

Increased output per man-hour since World War II has kept labor costs per unit of food marketed from rising as much as hourly earnings. Hourly earnings, including fringe benefits, have doubled since 1947-49, while labor costs per unit of product have increased 36 percent (table 4 and figure 3). So far in the 1960's, hourly earnings have increased 17 percent, while unit labor costs have advanced about 5 percent.

Table 4.--Hourly earnings of food marketing workers and labor cost per unit of product marketed, United States, 1947-64

(1947-49 = 100)		
Year	Hourly earnings of food marketing workers 1/	Unit labor cost
1947.....	93	91
1948.....	101	104
1949.....	106	105
1950.....	111	107
1951.....	118	114
1952.....	123	116
1953.....	131	118
1954.....	138	120
1955.....	141	118
1956.....	147	119
1957.....	154	122
1958.....	160	124
1959.....	164	124
1960.....	171	129
1961.....	178	130
1962.....	187	132
1963.....	193	133
1964 <u>2/</u> .....	200	136

1/ Includes imputed hourly earnings of proprietors and family workers not receiving stated remuneration; also includes supplements to wages and salaries.

2/ Preliminary.

Gains in output per man-hour are attributed mainly to technological improvements in marketing facilities and in production and distribution practices, to increased skill and capability of management and workers, and to economies of scale. Substitution of machines and other forms of capital for labor has made part of these gains possible. Increased capital costs per unit of product have partially offset savings in labor costs.

Capital costs.--Prices of new equipment edged up in 1964, and construction costs were up about 2 percent. Prices of new plant and equipment have risen 52 percent since 1947-49 (table 5). This rise was a major cause of the more than threefold increase in depreciation charges made by food marketing firms during this period (table 6). Another factor was the growth in the total value of depreciable assets through replacement, modernization, and extension of plant and equipment. Increases



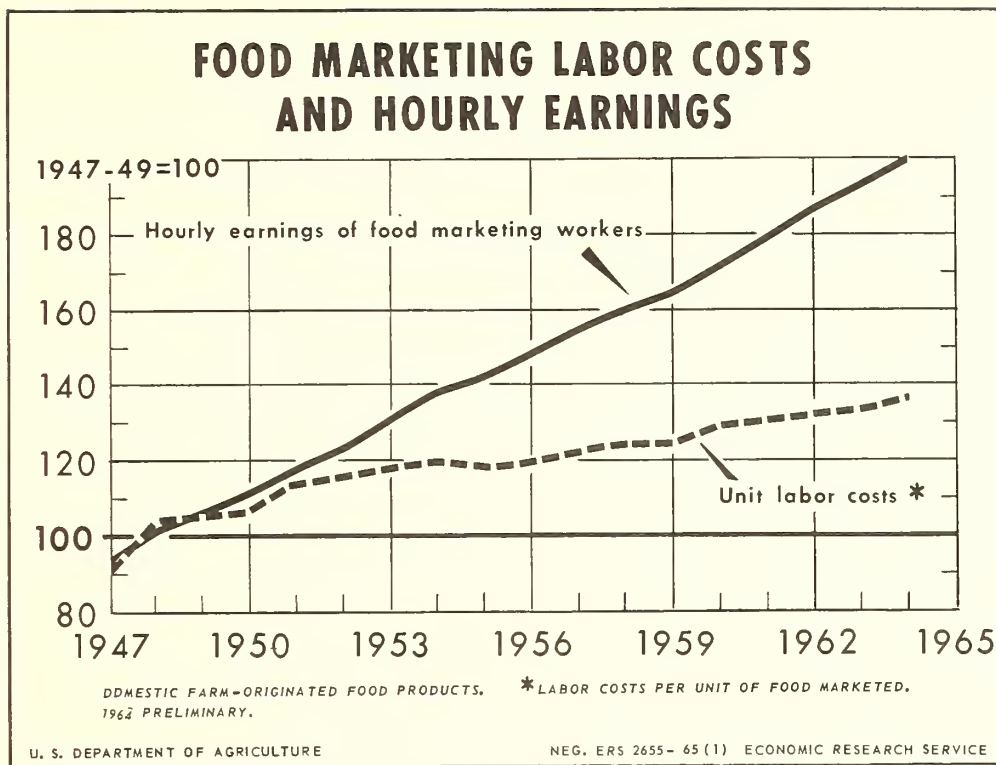


Figure 3

in depreciation rates per dollar of assets also helped boost total depreciation charges. Depreciation rates increased because of a reduction in the average service life of assets (from increased investments in equipment relative to plant) and the substitution of accelerated for straight-line depreciation.

Rental rates, property insurance, and prices of other services associated with property averaged higher in 1964 than in 1963 (table 5). Total rent payments by food marketing firms in 1963 (latest available data) were almost five times higher than in 1947-49 because of rising rental rates and greater use of leased plants and equipment (table 6).

Interest paid by food marketing firms totaled almost four times the 1947-49 average. This increase resulted from a rise in interest rates and growth in the volume of borrowed capital. Yields on high-grade, long-term corporate bonds averaged 4.40 percent last year, up from 4.26 percent in 1963 and 2.70 percent in 1947-49, indicating that rates on new long-term loans rose by about the same amount (table 5). Rates on short-term bank loans to business in major cities averaged about the same in 1964 as in 1963, but were more than twice those in 1947-49.

Depreciation, rent, and interest each increased much more than the volume of farm food products marketed, which was 42 percent larger in 1964 than in 1947-49. Thus, capital cost per unit of product marketed has gone up since 1947-49.

Transportation charges.--Although the cost of most inputs used by food marketing firms has increased, rail freight rates have moved down since 1958 (figure 4). Rail rates for agricultural commodities in 1963 average 1 percent below a year earlier and 5 percent below the 1957-59 average. Rates for livestock, fruits and vegetables, all grains, soybeans, and cotton in 1963 averaged slightly lower than in 1962.

Table 5.--Prices of inputs bought by marketing firms, 1947-63

(1947-49 = 100)							
Year and quarter	Intermediate goods and services						Yields on high-grade long-term bonds, per annum <u>4/</u>
	Goods					New plant: and equipment 3/	
	Total	Containers			Services 2/		
		Total	and				
			1/ packaging materials	Fuel, power: and light			
							Percent
1947-49.....	100	100	100	100	100	100	2.70
1950.....	106	104	105	100	109	108	2.62
1951.....	116	115	122	103	117	117	2.86
1952.....	116	114	118	102	121	119	2.96
1953.....	119	115	119	104	126	121	3.20
1954.....	120	116	120	104	127	122	2.90
1955.....	121	117	121	105	129	126	3.06
1956.....	127	122	129	109	134	134	3.36
1957.....	132	127	133	116	139	142	3.89
1958.....	134	128	135	112	144	145	3.79
1959.....	136	129	135	113	148	148	4.38
1960.....	138	130	137	116	151	149	4.41
1961.....	138	130	136	118	153	149	4.35
1962.....	139	129	137	117	155	149	4.33
1963.....	139	128	136	117	159	150	4.26
1964 <u>5/</u> .....	141	128	136	115	163	152	4.40
1963							
Jan.-Mar.....	139	129	136	118	157	149	4.20
Apr.-June.....	139	128	135	116	158	150	4.22
July-Sept.....	139	128	136	116	159	150	4.29
Oct.-Dec.....	140	128	135	117	161	150	4.33
1964							
Jan.-Mar.....	140	129	136	117	161	151	4.37
Apr.-June.....	141	128	135	114	163	151	4.41
July-Sept.....	---	128	136	115	---	152	4.41
Oct.-Dec.....	---	---	---	---	---	152	4.43

1/ Also includes prices of office supplies, restaurant supplies, and many other goods.

2/ Rent, property insurance and maintenance, telephone, etc.

3/ Weighted average of implicit price deflators for producers' durable equipment and new construction, other than nonfarm residential, gross national product, U. S. Dept. Commerce. Converted by ERS to 1947-49 = 100.

4/ Aaa corporate bonds; Moody's Investor Service.

5/ Preliminary.

Table 6.--Selected costs of food marketing firms, by function of firms, 1947-49 average, 1962 and 1963 <sup>1/</sup>

Item	Processors			Wholesalers <sup>2/</sup>		
	1947-49 average	1962	1963	1947-49 average	1962	1963
	Million dollars	Million dollars	Million dollars	Million dollars	Million dollars	Million dollars
Advertising.....	387	1,151	1,202	53	98	102
Depreciation.....	281	967	1,010	54	185	193
Interest.....	53	165	174	17	76	79
Business taxes <sup>3/</sup> .....	295	749	782	66	208	215
Rent.....	53	251	265	23	230	238
Repairs, bad debts, and contributions.....	275	580	601	31	143	147
	Retailers <sup>4/</sup>			All groups		
	1947-49 average	1962	1963	1947-49 average	1962	1963
	Million dollars	Million dollars	Million dollars	Million dollars	Million dollars	Million dollars
Advertising.....	132	583	600	572	1,832	1,904
Depreciation.....	155	615	630	490	1,767	1,833
Interest.....	18	90	90	88	331	343
Business taxes <sup>3/</sup> .....	165	601	618	526	1,558	1,615
Rent.....	200	809	828	276	1,290	1,331
Repairs, bad debts, and contributions.....	62	225	228	368	948	976

<sup>1/</sup> Preliminary estimates. Estimates are for both corporate and noncorporate firms.

<sup>2/</sup> Merchant wholesalers of groceries and related products.

<sup>3/</sup> Includes property, social security, unemployment insurance, State income, and franchise taxes, license fees, etc., but does not include Federal income tax.

<sup>4/</sup> Includes retail food stores; does not include restaurants and other eating places.

Estimates based on "Statistics of Income," Internal Revenue Service, and Census data.

The downtrend in rail freight rates is expected to continue, but reductions, as in the past, will be selective. Many rate changes have been made to meet truck, barge, and ship competition. In some cases, these other modes of transport will find it necessary to meet the lower rail rates to remain competitive. Truck rates for interstate movements, for unmanufactured farm products--although unregulated and generally not published--have been relatively stable; this stability is expected to continue.

Other costs.--Prices of goods and services (not including raw materials and labor) bought by marketing firms apparently averaged slightly more than 1 percent higher in 1964 than in 1963 (table 5). Prices were lower or stable for some items. Cost of fuel, power, and lights averaged almost 2 percent lower than in 1963. Prices for containers and packaging materials did not change.

Advertising costs, one of the largest expenditures by food marketing firms, increased about 4 percent from 1962 to 1963, the latest year for which data are



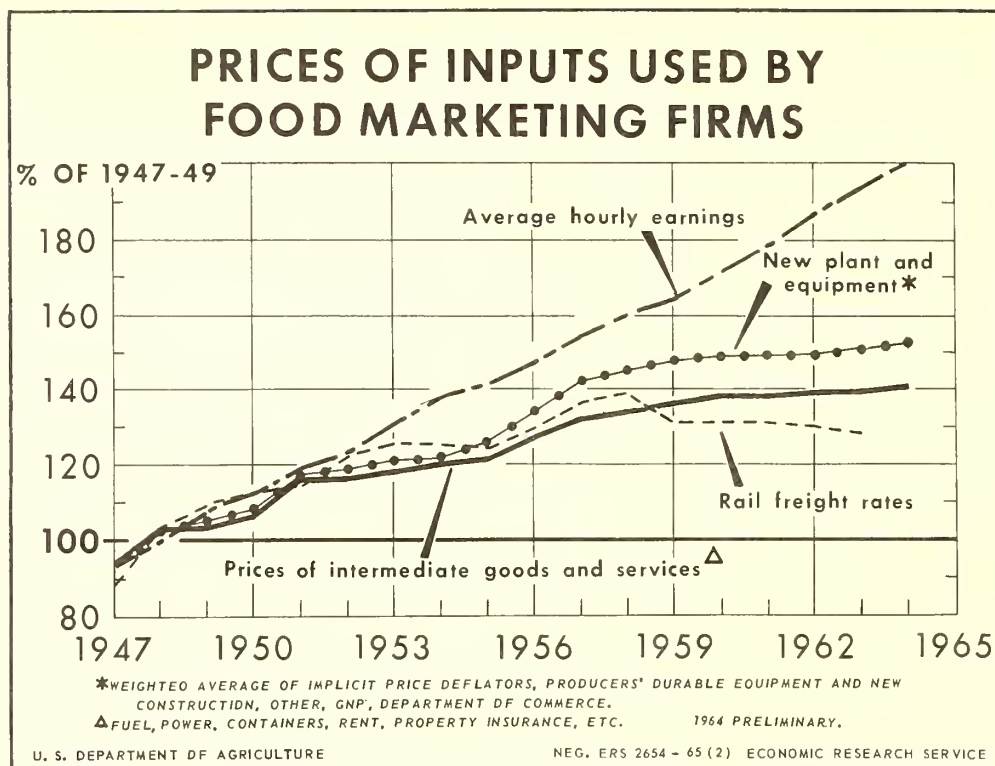


Figure 4

available (table 6). The 1963 total was more than three times the 1947-49 average. Increases in media rates and more extensive advertising accounted for this rise. The introduction of many new products was one reason for more advertising.

Corporate profits.--Profit rates before and after taxes for corporations manufacturing food products were greater last year than in 1963, both as a percentage of sales and as a percentage of stockholders' equity, according to a joint report of the Federal Trade Commission and the Securities and Exchange Commission. Before-tax profits averaged 4.7 percent of sales in the first three quarters of 1964, increasing from 4.4 percent in the like period in 1963; corresponding after-tax profits averaged 2.5 percent of sales in 1964, up from 2.2 percent in 1963. The ratio of profits after taxes to stockholders' equity averaged 9.8 percent in the first 9 months last year, compared with 8.8 percent a year earlier. Total profits after taxes were 17 percent greater in the first three quarters of 1964 than in the like period of 1963--the increase from 1962 to 1963 was 5 percent.

Leading corporations manufacturing food products have had higher profits ratios in recent years than in the early 1950's, when they declined sharply (figure 5). After-tax profits of 44 leading food manufacturing corporations averaged 2.4 percent of sales in 1960-63 compared with 1.9 in 1950-53 and 2.3 in 1947-49. After-tax profits of 49 leading food manufacturing corporations averaged 10.1 percent of stockholders' equity in 1960-63 compared with 9.4 in 1950-53 and 11.7 in 1947-49. <sup>1/</sup>

<sup>1/</sup> This group of corporations includes the 44 corporations for which profits-to-sales ratios are given.

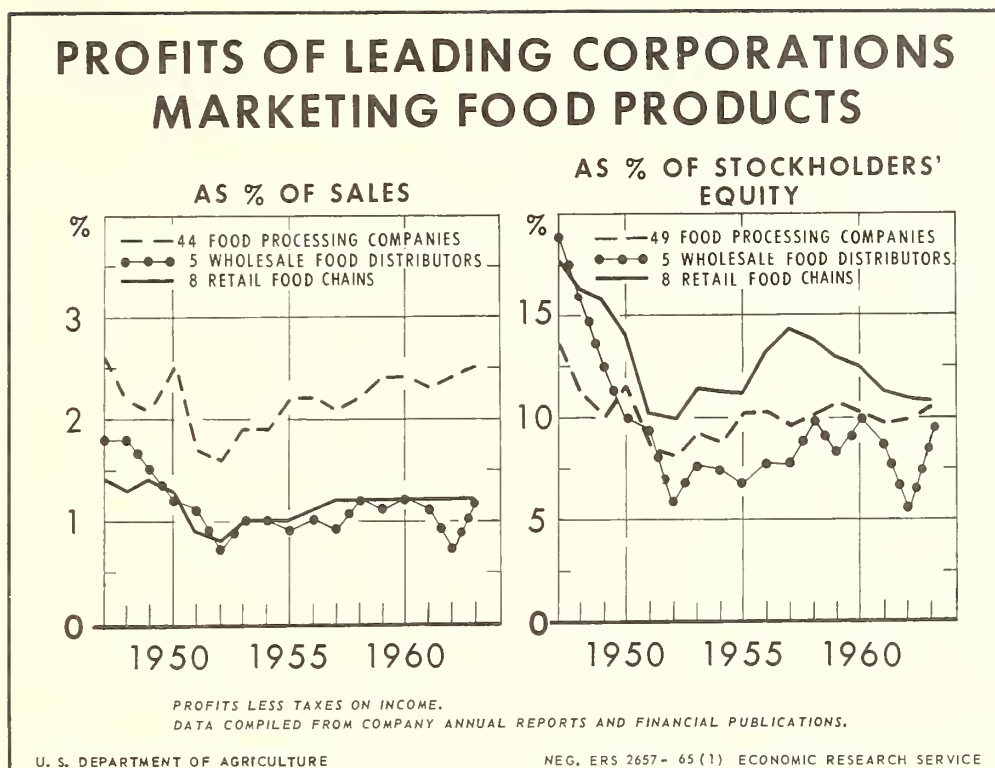


Figure 5

After-tax profits reported by a group of 14 leading retail food store chains totaled about 12 percent more in the first 9 months of 1964 than in the same period of 1963. The ratio of profits to sales, however, was 1.2 percent in both periods.

Profits after taxes for eight leading retail food chains as a percentage of sales have been relatively stable, averaging 1.2 percent annually in 1957-63, compared with 1.0 percent in 1950-53 and 1.4 in 1947-49. Although the ratio of profits to sales has remained stable since 1957, profits as a percentage of stockholders' equity have decreased each year since then, from 14.2 percent to 10.8 (figure 5).

### SPECIAL STUDIES OF MARKETING SPREADS AND COSTS

The Marketing Economics Division continued to make special studies of marketing spreads and costs in 1964. Some studies, such as the work on beef and bread margins, were especially timely. They helped satisfy the growing demand for information to supplement the market basket data and broaden our understanding of the increasingly complex structure of food marketing margins.

The farm-food market basket statistics were revised during the year (tables 1-3). Changes were based on a survey of consumer expenditures conducted by the Bureau of Labor Statistics in 1960 and 1961. As a result, the market basket statistics now more nearly represent the purchases of farm-originated food by moderate-income consumers.

The market basket in its improved form represents a precise but limited aspect of marketing margins. The sixty-odd items included are as representative as they

can be with the resources currently available for data collection. But they are a small and decreasing sample of all food items. We are giving more attention to possible divergences between prices and spreads for items that are priced for the market basket and for similar items not being priced.

Special studies of marketing costs also deepen our understanding of the forces affecting marketing margins. As wage rates for workers in marketing rise, for example, the farmer's share of the consumer's dollar tends to decline, but the decline is less for products and methods which require less labor. Similar effects follow on changes in freight rates, prices of container materials, etc. Technological innovations likewise change the relative costs of competing products and methods of marketing. Studies of such changes help increase marketing efficiency, provide information needed by farmers in their marketing decisions, and help guide public policy on agricultural marketing.

#### Variations in Retail Prices of Food--Frying Chickens as an Example

Rising retail prices of food cause concern among consumers and farmers. However, consumers may not at all times fully realize or make the best of the opportunities available to them for buying at the lower prices. These opportunities are illustrated by information about prices of fryers from a year-long survey of retail food outlets by the Marketing Economics Division. Prices of frying chickens may vary more widely among stores in a single town than prices of many, if not most, other foods. Yet this example is also pertinent in greater or lesser degree to other food products.

Producers of fryers have been particularly concerned about fluctuations in fryer prices. Many feel that retail price specials are not consistent with their long-run interests, and 29 cents per pound is often named as a price at or below which fryer prices may be considered unduly low. Questions have been asked about how often fryers were available at 29 cents or less and how widespread was the practice of specializing fryers.

Prices of about 260 food items were recorded by the Marketing Economics Division on each Tuesday and Friday during a year's survey of retail food outlets in Greensboro and Burlington, N. C. Prices of whole fryers in Greensboro are reported; remaining data are being processed. The fryer data in Greensboro were obtained from 20 stores; 6 were owned by chain organizations; 7 were owner-operated but affiliated with wholesalers; and 7 others were unaffiliated owner-operated neighborhood stores. Chain and affiliated stores averaged around 9,000 and 5,600 sq. ft. of sales area respectively. All chain outlets and four of the seven affiliates had more than 5,000 sq. ft. of sales area. The independents averaged about 900 sq. ft. of sales area.

Wide variations in fryer prices among stores.--From July 1, 1962, through June 30, 1963, prices of whole fryers varied considerably among these stores from week to week and from Tuesday to Friday within weeks. Although nearly two-thirds of the prices recorded were 39, 35, or 33 cents per pound, yearly averages for individual stores ranged from 28.8 to 42.1 cents. By comparison shopping, a consumer could have bought fryers at 29 cents a pound or lower in at least one store on all but 3 of the 104 days prices were recorded. On more than half of the Fridays, they were available at these prices in from one-fourth to one-half of the stores. Many of the stores were part of organizations with outlets in various parts of this city, so the consumer probably would not have had to travel out of her neighborhood to buy whole fryers at these prices on weekend shopping days.



The difference in prices of whole fryers between the lowest price store and the highest price was as little as 6 cents and as much as 20 cents a pound. On about 8 out of 10 days, the high price and the low price differed by 14 cents a pound or more. The range tended to be wider on Fridays than on Tuesdays (table 7).

Table 7.--Chickens, fryers, whole: Differences between highest and lowest prices in 20 retail food stores, Tuesdays and Fridays, July 1, 1962, through June 30, 1963, Greensboro, N. C.

Price differences per pound	Total period	Tuesdays	Fridays
Cents	Days	Days	Days
None.....	0	0	0
1 - 4 .....	0	0	0
5 - 10.....	8	6	2
11 - 15.....	61	38	23
16 - 20.....	35	8	27
Total days.....	104	52	52

Variations in prices charged by individual stores.--Weekly average prices of fryers in a store often varied 5 cents a pound or more from one week to the next, particularly in the larger stores. Fluctuations in the weekly averages were most often due to price reductions on Fridays. For example, one store reduced its price from 39 cents on Tuesday to 23 cents on Friday. The following week, the price held at 39 cents both days.

Friday prices were higher than those on Tuesday for about one-fourth of the weeks. Increases from Tuesday to Friday usually were 2 cents or less, while more than half of the reductions from Tuesday to Friday were greater than 2 cents.

Average prices changed much less from month to month than from week to week or day to day. Differences between the highest and lowest monthly averages in most stores were around 4 or 5 cents. Changes from one month to the next were seldom more than 1 or 2 cents a pound.

Prices tended to be highest in September and lowest in December and April. In some smaller stores, however, there was little seasonal change. One store charged 35 cents per pound during 11 of the 12 months; a second charged 43 cents during 7 months; and a third store held the price at 33 cents during the last 6 months of the survey.

Type of ownership affects pricing practices.--During the survey, prices were lowest in affiliated stores, averaging 32.4 cents a pound--3.3 cents less than in chain outlets and 4.5 cents less than in independents. Among stores of the same ownership type, the daily price range was smallest for chain outlets and largest for the unaffiliated independents. On about half of the days, prices varied by 4 cents or less among chain stores and up to 10 cents among the affiliates. The range of prices in independent stores was from 12 to 18 cents on two-fifths of the days.

More affiliated stores than chain priced fryers at 29 cents a pound or less. At least twice a month some affiliated stores offered whole fryers at 29 cents or less;

two outlets maintained them at this level for more than half of the pricing days. The three chains each offered fryers at these prices about once a month. Seldom did two or more of these chains price fryers in this range on the same Friday. Only one independent frequently priced fryers this low. This store offered them at 29 and 27 cents about half the time. Once during the year another independent lowered its price to this level.

Comparison of prices at different market levels.--Monthly average prices of fryers in these chain and affiliated stores tended to rise and fall with farm prices in North Carolina and prices paid by retailers in Atlanta. <sup>2/</sup> Weekly average retail prices, however, did not closely follow prices at other market levels (figure 6). The wide fluctuations in retail prices between Tuesday and Friday in many stores were apparently unrelated to changes in the prevailing farm or wholesale prices of fryers. Weekly average prices in the individual stores rarely went below the average prices paid by retailers. On a day-to-day basis, chain and affiliated outlets on several Fridays offered fryers at prices below the price paid by retailers in the same period.

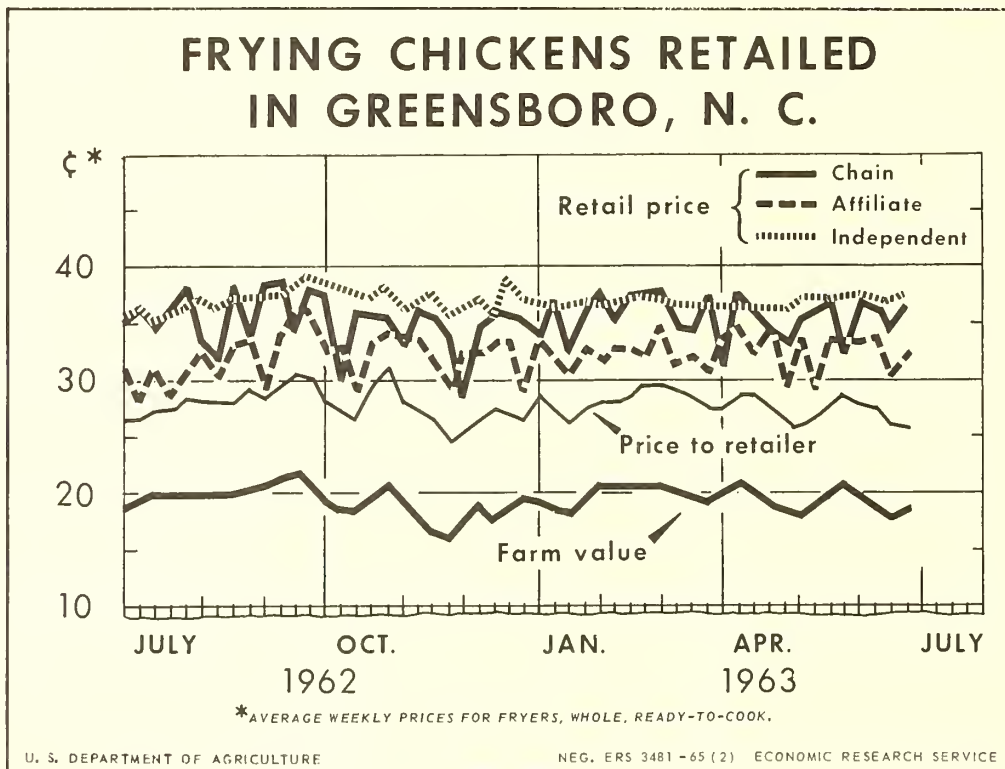


Figure 6

The farm value (figure 6) is the return received by farmers for the quantity of live frying chicken or broiler equivalent to 1 pound of ready-to-cook frying chicken. It is computed by multiplying the farm price per pound live weight by 1.37.

<sup>2/</sup> Information on prices paid for fryers by these firms was not recorded during the survey. Farm prices for North Carolina and prices to retailers were compiled from reports issued from Birmingham, Ala., by Federal-State Market News Service.

Owners of independent stores appeared to determine their own prices without much regard to current prices to producers or prices in other stores.

### Beef

Retail prices of Choice beef averaged 77.8 cents per pound last year, 3.2 cents lower than in 1963 (figure 7). The farm value averaged 42.4 cents, down 4.2 cents from the 1963 average. These decreases accompanied an increase of 12 percent in beef production.

Although the farm value of Choice beef declined in both 1963 and 1964, it averaged 8 percent higher in 1964 than in 1956, when it reached its lowest level in the postwar years. The retail price was 18 percent higher last year than in 1956.

The spread between retail prices and farm values of Choice beef increased to a record annual average of 35.4 cents per retail pound in 1964, 1.0 cent more than the average for 1963. Thus, it followed the general upward trend of the last 10 years. The spread fluctuated considerably from month to month around the long-run trend, ranging from 33.6 cents in August to 37.3 cents in October (figure 8). All of this increase was between the farm value and the wholesale value. The spread between the wholesale value and the retail price decreased last year, after rising sharply from 1962 to 1963 (figure 7).

Marketing spreads for beef tend to widen when cattle prices fall and to narrow when these prices rise. Prices of Choice beef cattle fell in 9 of the 12 months of 1963 and the farm-retail spread increased in the same months. In 1964, cattle prices fell in 5 months and the spread increased in each of these months and also in one additional month. There is close association between changes in the farm-retail spread and in cattle prices. Nearly every increase in the spread reflects a fall in cattle prices and nearly every decrease, a rise in cattle prices (figure 8).

Cattle prices and the farm-retail spread tend to move in opposite directions because the retail price of beef is more stable than prices of beef cattle. Although prices of beef and of cattle follow about the same pattern of adjustment to short-run changes in supply and demand, changes in retail beef prices lag almost a month behind changes in cattle prices (figure 7). Moreover, changes generally are smaller at retail than at the farm level.

Changes in the demand for meat appear first at retail and are transmitted to the livestock producers by the marketing system. But changes in demand tend to be slow and gradual. Changes in supply, however, are frequent and can be sudden. They show up first at the farm level in the form of an increase or decrease in cattle marketings, causing an immediate adjustment in live prices. Effects of this change in cattle marketings move through the marketing system at about the same rate as meat moves. As a result, there is a 2-3 week lag between changes in cattle prices and changes in retail prices.

Research has shown that retailers tend to hold "regular" prices of beef steady relative to cattle prices. They adjust to rising or falling cattle prices by changing the frequency of "special" prices. They may also change the amount by which special prices are lower than regular prices. Special prices are not fully represented in the data from which published average retail prices are derived. Thus, available retail price data are more stable than the actual averages of all regular and special prices.



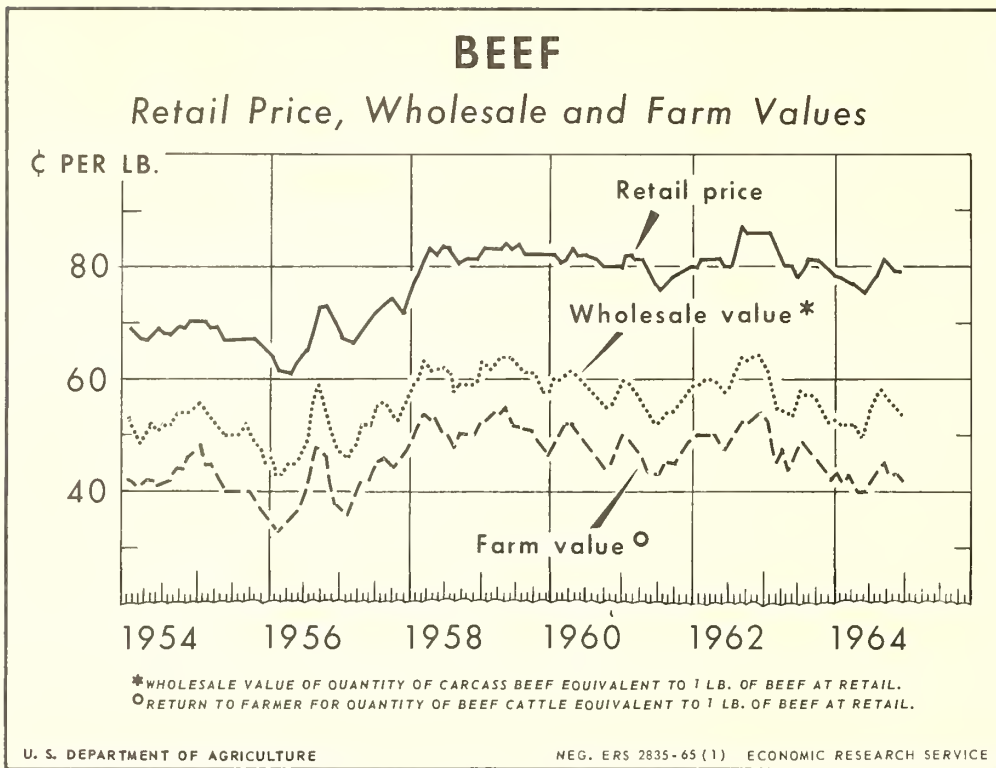


Figure 7

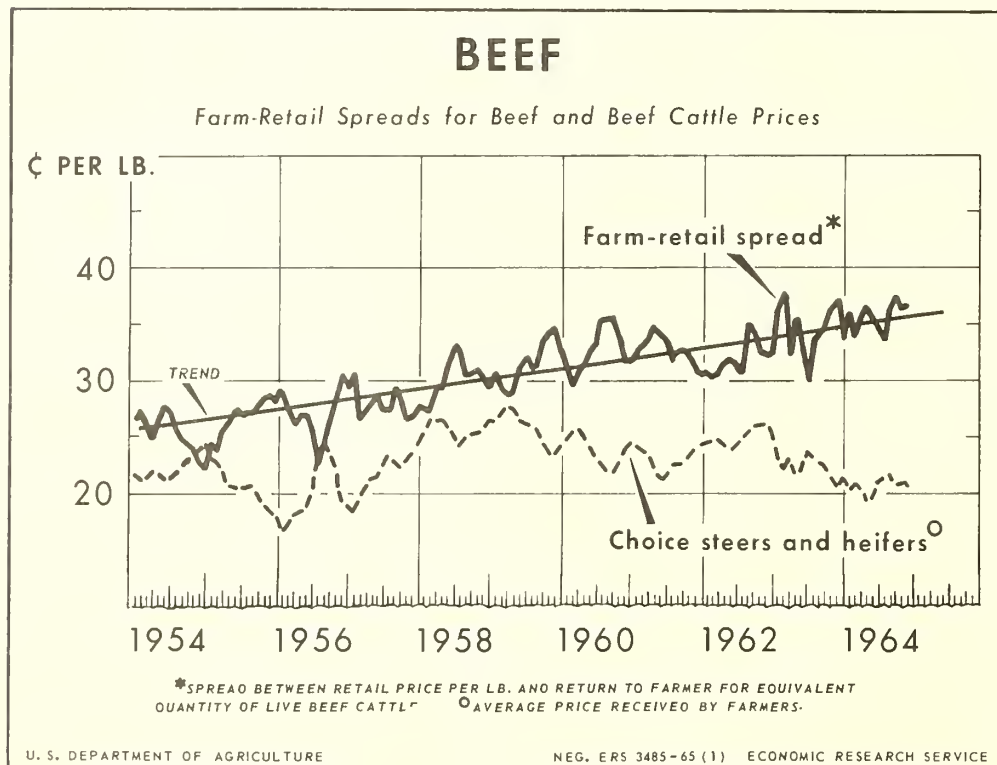


Figure 8



The pattern of short-run changes in the farm-retail spread resulting from relatively stable retail prices and more flexible cattle prices apparently has not changed significantly in the last 10 years.

Since World War II, the farm-retail spread has increased almost every year in spite of up and down swings in cattle prices. During the last decade, the long-run trend increased at an annual rate of about 1.0 cent per pound (figure 8).

### Chickens and Eggs

Frying chickens.--Prices for frying chickens retailed in 10 cities decreased at all market levels from 1963 to 1964 (figure 9). The retail price averaged 38.9 cents per pound in 1964 compared with 39.4 cents in 1963 and 40.1 cents in 1959-61.

Farm-retail spreads on ready-to-cook, Grade A frying chickens in these cities increased slightly to an average of 19.6 cents per retail pound in 1964 from 19.2 cents in 1963 and 18.5 cents in 1959-61. Both the retail store spread and the farm-retailer spread increased in 1964. The farm-retailer spread averaged about the same last year as in 1959-61, but the retail store spread was 1.0 cent larger than in 1959-61.

The farmer's share of the retail price of frying chickens in the 10 cities averaged 50 percent in 1964--down 1 point from the year before, and down 4 points from 1959-61.

Lower prices for frying chickens resulted largely from increased supplies available for the domestic market and from greater competition from red meats. Increased supplies were mainly the net result of a year-to-year increase in production--5 percent in January through November 1964. USDA chicken purchases for the School Lunch

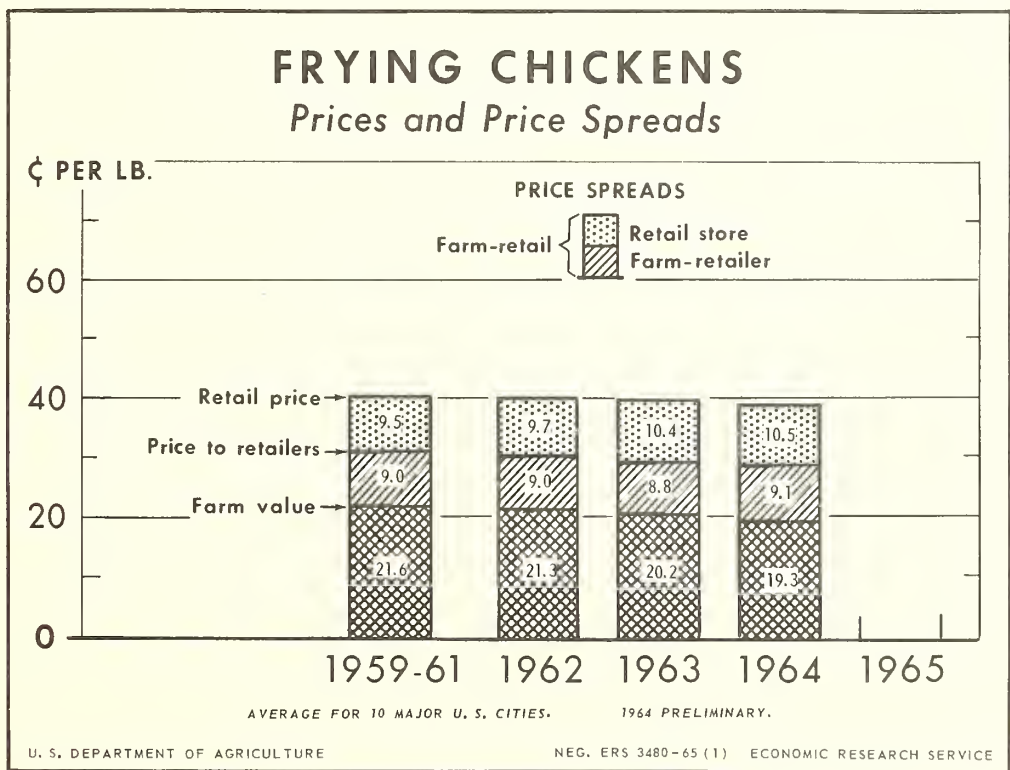


Figure 9

Program in 1964 were about 4 percent larger than in 1963, and helped keep prices from decreasing more. Civilian per capita consumption of frying chickens was estimated at 27.3 pounds in 1964--0.3 pound over 1963, and the largest on record.

Eggs.--Retail prices of large eggs of Grade A or better quality retailed in 10 major cities in the United States averaged 55.2 cents per dozen in 1964, the same as in 1963 (figure 10), and about 3 percent below the average for 1959-61. Prices at other market levels averaged slightly lower last year than in 1963. The larger decrease was in the average price to retailers. Farm-retail spreads varied by cities. Generally they were narrower than in 1963. Decreases resulted from smaller farm-retailer spreads--those between prices received by farmers and prices paid by retailers. Retail store spreads increased. The farmer's share of retail prices for large eggs in 10 cities averaged 57 percent--down 1 percentage point from 1963.

The average farm-retail spread for eggs marketed in 10 cities has fluctuated within narrow limits in recent years. Retail store spreads have increased, but these increases generally have been about offset by decreases in farm-retailer spreads.

The decline in egg prices from 1963 to 1964 accompanied an increase of 2.2 percent in egg production. This increase was greater than the 1.4 percent increase in U.S. population. An important factor accounting for the relative stability in prices was the increased movement of eggs into further-processed uses. Liquid egg production in 1964 was equivalent to 16.7 million cases of shell eggs--12 percent above the preceding year. Government purchases of dried eggs in 1964 amounted to nearly 1.5 million cases (shell equivalent)--about 88 percent more than in 1963.

#### Fluid Milk

The price of milk sold in retail stores in U. S. urban areas averaged 47.7 cents per half gallon in 1964--0.1 cent higher than in 1963. Prices of milk delivered to homes rose to 52.8 cents per half gallon from 52.4 in 1963. The farm value, which is the same for milk sold in both ways, averaged 21.7 cents last year, 0.2 cent more than in 1963. Thus, the farm-retail spread decreased 0.1 cent for store milk but increased 0.2 cent for home-delivered milk.

The annual average farm-retail spread for milk sold in retail stores has changed little since 1960; however, that for home-delivered milk has increased slightly.

Operating costs last year for a group of 70 firms distributing milk were up 8 percent from 1954. Operating costs averaged \$4.71 per 100 pounds of milk and cream processed (average for first half of 1964) compared with \$4.35 in 1954 (figure 11). Two-thirds of this increase resulted from rises in salaries, wages, and commissions--costs that accounted for about half of total operating costs in each year. Costs of containers, the second most important cost item, rose 8 percent per 100 pounds of milk and cream processed. Other expense items that made significant advances were insurance, up 67 percent; and repairs, rent, and depreciation, up 16 percent. Raw material cost of these firms decreased to \$5.79 per 100 pounds of milk and cream processed in 1964 from \$5.90 in 1954, partially offsetting the increase in operating costs. Costs increased more than receipts during the 10-year period; therefore, net profits declined. Average sales value declined, in contrast to the slight increases in prices, probably because of continued shifting of sales from higher priced to lower priced items and channels of sale.

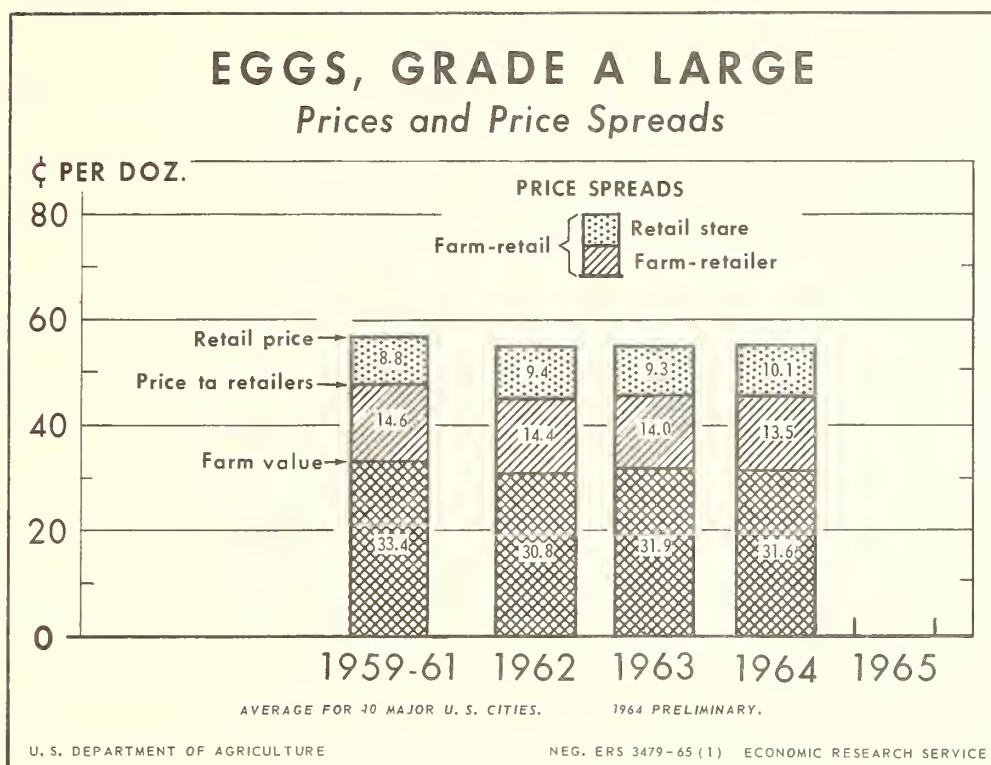


Figure 10

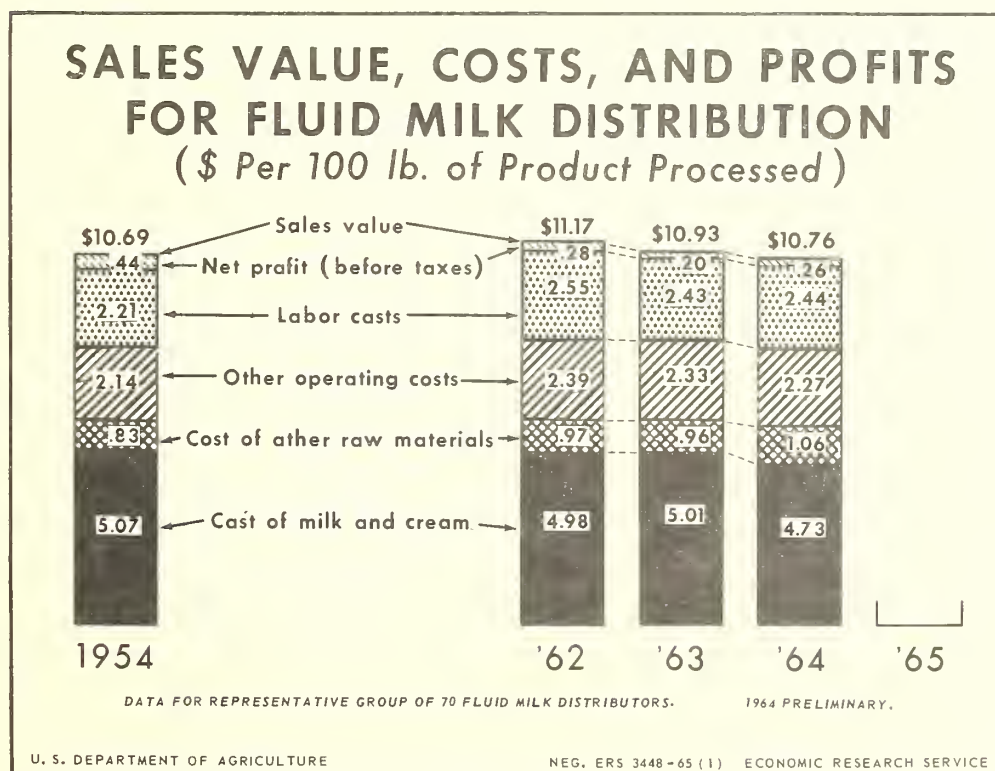


Figure 11



## Bread

In 1964, for the first year since World War II, the average price of white bread did not increase. The retail price of a 1-pound loaf of white bread averaged 20.7 cents, the same as in 1963. The price declined from 20.7 cents in January to 20.5 cents in May, then rose gradually to 21.0 in December. The 1964 average was 8.0 cents above the 1947-49 average of 12.7 cents.

The farm value of all farm ingredients in a 1-pound loaf of white bread was 3.2 cents, up 0.1 cent from 1963, but 0.1 cent below 1947-49. Because of the relative stability in the farm value for bread, the continued price rise has resulted from increased marketing charges. The farm-retail spread averaged 17.5 cents per loaf in 1964, down 0.1 cent from 1963 but up 8.1 cents from 1947-49. The farmer's share of the dollar consumers spent for bread declined to 15 percent in 1963 and 1964, from 26 percent in 1947-49.

Wholesale bakers received a gross spread of 11.4 cents per pound, the same as in 1963; retailers received a spread of 3.7, also unchanged. Spreads for baker-wholesalers and for retailers each were about double those in 1947-49 (figure 12). The miller's spread amounted to 1.0 cent in both 1963 and 1964 compared with 0.6 cent in 1947-49. The combined spread for transporting, handling, and storing all ingredients and for processing ingredients other than flour averaged 1.4 cents in 1964, down 0.1 cent from 1963. Wholesale bakers receive a large proportion of the retail price of bread because resources needed to convert flour into bread and distribute it are much greater than those needed to produce wheat or flour.

After July 1, 1964, the value of the Federal domestic wheat marketing certificate was added to the market price of wheat in calculating the farm values of wheat

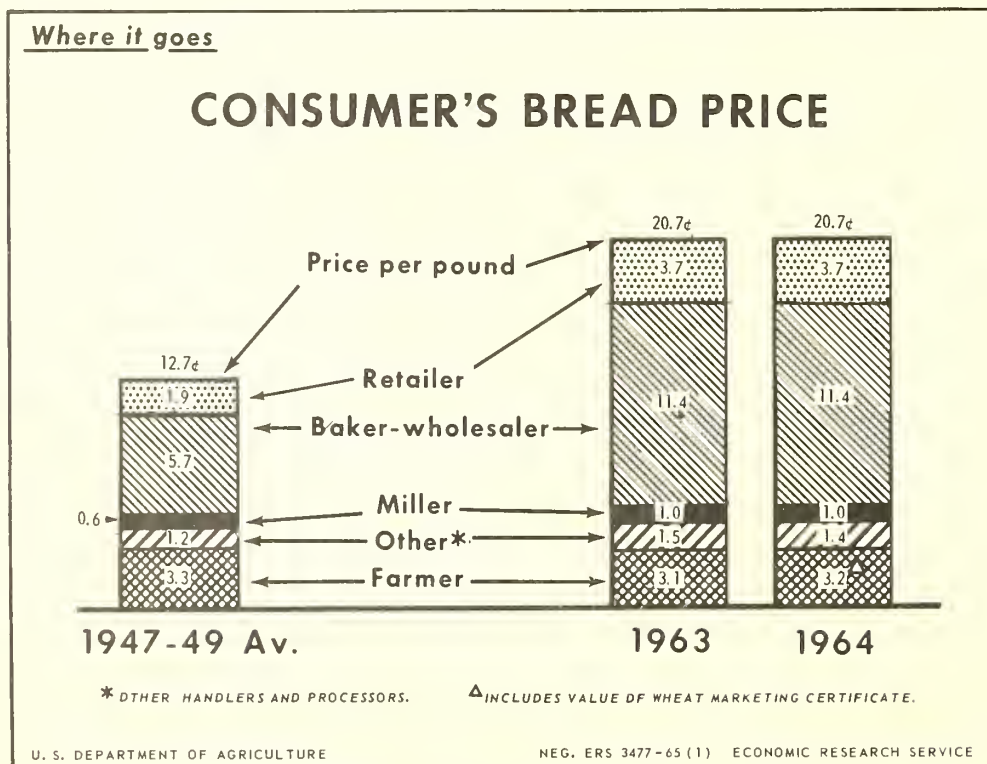


Figure 12

products. The farm value of the wheat in a 1-pound loaf of white bread increased from an average of 2.4 cents for the first half of 1964 to 2.7 cents (including the value of the wheat marketing certificate) for the last half. The retail price of bread averaged 20.8 cents in the second half of 1964, 0.2 cent more than in the first half; the farm-retail spread declined from 17.6 cents to 17.5 cents.

Research in baking industries and applied results.--The University of Nebraska recently published the results of a study of the baking industry it conducted under contract with the Marketing Economics Division. Comparisons of costs of bread production were made between model plants equipped with standard automated batch equipment and those with continuous-mix equipment. These comparisons revealed economies in baking associated with automatic processes that are due largely to increasing the capital-labor ratio per pound of output. For example, in a medium-size bread plant, replacing hand labor and less efficient machines with fully automatic continuous-mix equipment resulted in a decrease in direct production labor from 15 workers to 5 workers per shift. At full capacity operation, production labor costs were reduced from 0.9 to 0.3 cent per pound of output.

Furthermore, these results showed even greater potential efficiencies possible through adjustments in bread distribution, routing, and associated practices. Important possible adjustments in the distribution process include (1) adoption of a distributing organization that facilitates specialization of delivery, display, and billing labor by function; in-store disposal of day-old bread; and exclusive use of newspaper general-food advertisements, and (2) increases in size of delivery vehicles.

Potential maximum long-run annual savings for the baking industry from such delivery-associated improvements are expected to approximate \$270 million from specialization of delivery, display, and billing labor by function; \$63 million from in-store disposal of day-old bread; \$92 million from changes in advertising; \$30 million from increasing the size of delivery vehicle; and \$75 million from associated miscellaneous savings and sales supervision, etc. These aggregate to a maximum potential savings of more than a half-billion dollars a year for the industry.

The University of Nebraska reports that 1,600 copies of their publication have been distributed to bakery managers and interested management groups. One group used it in a training program for its managers. A trade publication used portions of the report in eight of its weekly issues.

Industry interest and efforts to improve efficiency achieved substantial advances in both production and distribution at more than 100 bakeries affiliated in one group. In-plant productivity increased from 437 pounds of bread per man-hour in 1958 to 534 pounds in 1963. This increase offset approximately 80 percent of the increase in production wage rates and fringe benefits during this period. As a result, production labor costs per pound of bread increased from 0.0208 cent in 1958 only to 0.0220 cent in 1963. Increases in distribution efficiency absorbed all of the rise in wage rates of driver salesmen from 1958 to 1963. Products delivered per customer per week increased from 108 pounds in 1958 to 135 in 1963. Total pounds delivered per route per week increased from 4,659 to 5,137.

#### Frozen Orange Juice Concentrate

Retail prices of frozen orange juice concentrate varied greatly during the four seasons 1960-61 through 1963-64. These variations were caused primarily by sharp season-to-season changes in production of Florida oranges. Production totaled



nearly 87 million boxes in 1960-61. Generally favorable conditions caused an increase of 31 percent the following season, a record crop. A freeze in late 1962 reduced the 1962-63 crop to 74 million boxes and the 1963-64 crop to 58 million. The volume of oranges processed into concentrate in 1963-64 was less than half that in 1961-62. As a consequence, the retail price increase from 1961-62 to 1963-64 averaged 59 percent for concentrate sold in Chicago and 52 percent for that sold in New York City.

As concentrate prices rose following the freeze, questions were raised as to the justifiability of the increases and as to the distribution of the retail price among marketing agents and the growers. The small inventories of frozen orange concentrate held by Florida processors at the end of the 1962-63 and 1963-64 seasons provided at least a partial answer to the first question. Figure 13, which shows marketing spreads, deals with the second. 3/

Although seasonal average retail prices for frozen orange concentrate fluctuated during the period 1960-61 through 1963-64, the wholesale-retail spread increased each season. Increases over the period were 66 percent in Chicago and 41 percent in New York City. Wholesale-retail spreads as a percentage of the retail price varied considerably but had no discernible trend. They ranged from 25.5 percent to 33.7 percent in Chicago and from 27.6 percent to 35.0 percent in New York City.

The second largest marketing spread is that of the processor, which includes the services of processing, warehousing, and selling. For frozen concentrate retailed in both markets, this spread was about 19 percent of the retail price in 1960-61, increased to around 26 percent in 1961-62, increased again slightly the following season, and then dropped sharply to about 12 percent in 1963-64. These data, however, are based on spot or cash prices received by growers for oranges. Many of the oranges for concentrating were sold through cooperatives or participation plans, and for this fruit there would have been adjustments in the processors' and growers' shares when the concentrate is sold and actual costs and returns become known. The processors' spreads, shown here for 1960-61 and 1963-64, were below costs, as reported by the University of Florida. Therefore, for participation plan fruit, the processors' shares for those seasons might have been adjusted upward and the growers' shares decreased. For 1961-62 and 1962-63, the processors' margins were considerably above costs and, consequently, might have been reduced somewhat with a corresponding increase in growers' returns.

Growers' returns moved with the retail prices, but as often as not had a greater absolute change. During the four seasons, the annual average growers' share varied from 29 to 46 percent of the retail price of concentrate sold in Chicago and from 28 to 48 percent of the retail price in New York.

### Potatoes

The average retail price of Maine round white potatoes sold in New York City during the 1963-64 marketing season (November through April) was nearly a dollar per 100 pounds lower than the price of the preceding season (table 8). In contrast, prices at both the wholesale and farm levels were higher. Production of Maine

---

3/ Processed orange products may be consumed a year or more after harvest of oranges from which they are processed. This complicates the calculation of marketing spreads. In calculating the spreads in figure 13, the crop of a given season was assumed to have been consumed by the beginning of the following season.

Sales in Chicago and New York City

## PRICES AND MARKETING SPREADS FOR FROZEN ORANGE CONCENTRATE

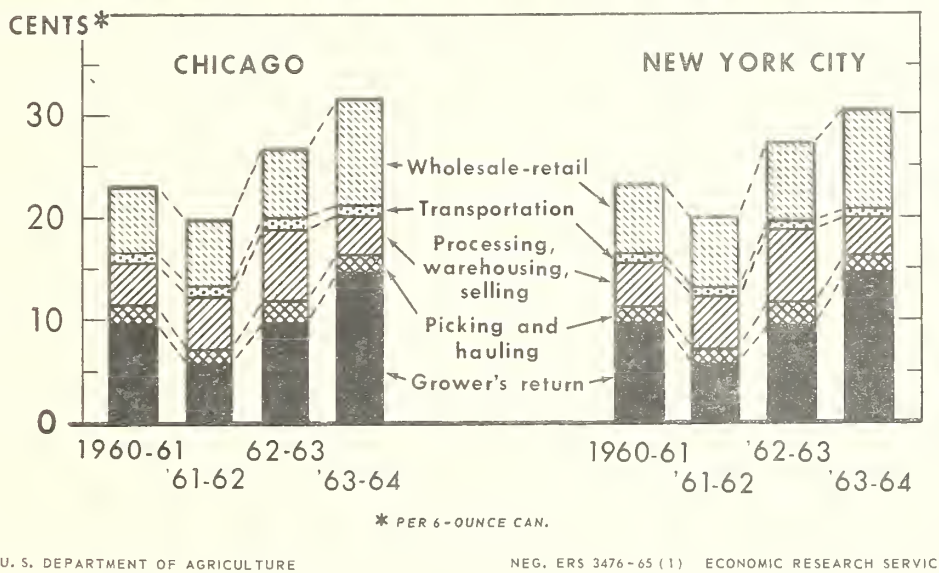


Figure 13

potatoes in 1963 was down from the previous season. But the total U. S. fall potato crop was larger than the year before and both U. S. and Maine crops were larger than the 1958-62 average. These price changes were accompanied by a decrease in the retail margin to \$3.20 per hundred in 1963-64 from \$4.43 in 1962-63. The grower-packer share in 1963-64 was \$1.70 compared with \$1.44 in the preceding season.

Prices for Western Russet potatoes sold in New York City during 1963-64 (September through April) were about 4 percent above the preceding season at retail and 5 percent at wholesale, but averaged nearly 3 percent lower at the farm level. Production of Idaho Russets was nearly 20 percent above the previous year. The retail margin in 1963-64 was up 15 cents per hundred from 1962-63 but averaged 55 percent of the retail price during both seasons. The grower-packer share dropped from 25 percent in 1962-63 to 23 percent in 1963-64.

Data are available for part of the 1964-65 marketing season. These are of particular interest because of sharp reductions in the fall potato crop in most producing areas--total U. S. production was 11 percent smaller than the fall crop in the preceding year and the smallest since 1959. Although the Maine crop increased, the reduced U. S. supply caused sharp price increases in the fall of 1964. Retail prices in November and December were over \$8 per 100 pounds, nearly \$2 above the average for the preceding season. About half of the increase went to the grower-packers and the remainder to marketing agents.

The Western Russet crop in 1964 was considerably smaller than a year earlier, and prices were up sharply. Retail prices in September 1964 averaged more than a dollar above the average of the 1963-64 season and by December were more than \$2 higher. Most of this increase went to the growers. The grower-packer price in December was \$6.02, or 46 percent of the retail value.



Table 8.--Potatoes, Maine round white and Western Russet: Prices and marketing spreads per 100 pounds for sales in New York City, season averages, 1962-63 and 1963-64, and monthly, September-December 1964 1/

Type and season	: Price per 100 pounds :		: Marketing spreads :				: Grower-	
	Retail	Wholesale	Retail store		Shipping point to retail		packer returns	
	Dol.	Dol.	Dol.	Pct.	Dol.	Pct.	Dol.	Pct.
Maine round white 2/								
1962-63.....	7.09	2.66	4.43	63	1.22	17	1.44	20
1963-64.....	6.10	2.90	3.20	52	1.20	20	1.70	28
1964								
November.....	8.01	3.80	4.21	53	1.16	14	2.64	33
December.....	8.11	4.70	3.41	42	1.88	23	2.82	35
Western Russet 3/								
1962-63.....	10.80	4.86	5.94	55	2.21	20	2.65	25
1963-64.....	11.18	5.09	6.09	55	2.51	22	2.58	23
1964 4/								
September.....	12.42	6.00	6.42	52	3.25	26	2.75	22
October.....	12.21	5.50	6.71	55	2.76	23	2.74	22
November.....	12.84	7.30	5.54	43	2.36	18	4.94	39
December.....	13.24	8.80	4.44	33	2.78	21	6.02	46

1/ U. S. No. 1, Size A, 1-percent allowance for waste and loss.

2/ Season November through April.

3/ Season September through April.

4/ September and October from Washington; November and December from Idaho.

### Sugar

The retail price of sugar declined to an annual average of 64.0 cents per 5 pounds in 1964 from 65.8 cents in 1963. The farm value or returns to farmers for an equivalent quantity of sugar beets and sugarcane averaged 23.9 cents last year, 0.9 cent more than in 1963. The farm value in 1964 was based on returns to farmers from sugar beets and mainland cane harvested in 1963. The farm-retail spread decreased to 40.1 cents from 42.8 cents in 1963. During 1958-62, before the sharp increase in sugar prices in 1963, the farm-retail spread averaged 35.7 cents.

Sugar prices in the United States declined during most of 1964, returning to about the levels prevailing before the unusual price increase in 1963. The average quoted wholesale price of refined beet sugar in the Chicago-West territory, where large quantities of beet sugar are marketed, declined to 8.6 cents per pound in September 1964, where it remained through December. This was 24 percent below January 1964 and the lowest monthly average since November 1961.

Prices of refined beet sugar are of particular interest to sugar beet growers because the prices growers receive for sugar beets are directly related by grower-processor contracts to the net returns (price minus marketing costs) received by

processors from the sale of their sugar. Most of these sales are made at wholesale prices; consequently, growers' receipts from the sale of sugar beets are directly affected by changes in the sales price of refined beet sugar.

Sugar beet prices are determined on an annual basis from the net returns received by the processor over a 12-month period. This period most commonly begins in October. The average basis of payment (processors' net returns) for the 1962-63 sugar beet crop in the United States was 8.16 cents per pound of sugar, highest since 1920-21. The preliminary figure for 1963-64 is 8.00 cents, still unusually high. If prices of beet sugar for 1964-65 should remain near their level during October-December 1964, the settlement basis for the 1964-65 crop would be lower than the unusually high figures for the last 2 years and about equal to the average level prior to 1963. This would mean somewhat lower prices for 1964-65 sugar beets.

Prices of raw sugar, duty paid, at New York declined to 6.17 cents per pound in November 1964, about one-third below January of that year. They rose to an average of 6.55 cents in December 1964.

Prices received for sugarcane by growers in Louisiana, Florida, and Puerto Rico are related to raw sugar prices, generally to prices at New York during certain specified periods of each crop year, usually October through January, February, or March for Louisiana; November through August for Florida; and the calendar year for Puerto Rico. In addition, a small part, usually less than 3 percent of the payment received from processors by sugarcane growers in these areas, is related by contract to the price of molasses.

The price of sugar used in the formula to determine the price processors paid for sugarcane in 1963-64 in Louisiana was 8.995 cents per pound, 42 percent above 1961-62, the last crop year before the unusually high prices of 1963 and early 1964. The corresponding figures for Florida were 7.550 cents and 18 percent; for Puerto Rico, 7.67 cents and 33 percent. Raw sugar price levels during the last quarter of 1964 would indicate lower prices than in the previous year for 1964-65 crop-year sugarcane produced in Louisiana, Florida, and Puerto Rico.

Hawaiian sugarcane production is highly integrated by common ownership with the milling of sugarcane and the refining of raw sugar. Consequently, returns depend largely on the prices at which the refined sugar is sold. Again, declines in the prices of refined sugar suggest lower returns from sugarcane production in 1965 than the unusual return of the 2 previous years.

#### Marketing Bill for Cigarettes

Expenditures for domestically consumed cigarettes reached \$7.1 billion in 1963, up \$0.3 billion from the previous year (figure 14). This increase reflected cigarette price rises and increased consumption per capita. Increases in average retail prices ranged from 0.3 cent per pack for regular cigarettes to 0.6 cent per pack for king-sized filter cigarettes. Per capita consumption by persons 18 years and older (including overseas forces) increased to 4,345 cigarettes in 1963--80 units more than in 1962. Per capita consumption decreased sharply in the early part of 1964, but considerably recovered later in the year. Per capita consumption for the year is tentatively estimated at 4,135 cigarettes.

The farm value of domestic tobacco used in cigarettes bought by U. S. consumers decreased slightly in 1963, despite the increase in cigarette consumption. Prices

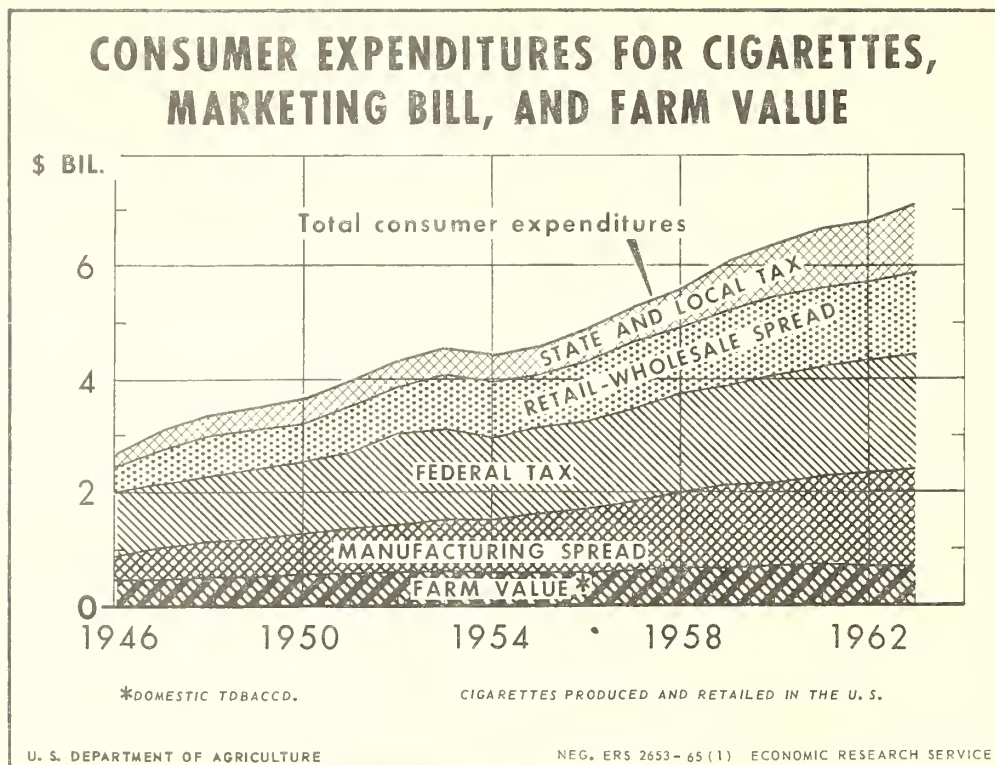


Figure 14

received by farmers for some types of cigarette leaf tobacco were lower in 1963 than in 1962. Also, the volume of leaf tobacco used increased by a smaller proportion than consumption. Expressed as a percentage of consumer expenditures, the farm value of leaf tobacco used in cigarettes has declined while marketing charges have increased. The farmer's share of domestic consumer expenditures declined from 15.9 percent in 1946 to a low of 9.4 percent in 1963. Although farm prices for cigarette tobaccos have risen steadily since 1947, the increase has not been sufficient to offset the effect on the manufacturer's raw material cost of the reduction in tobacco required per 1,000 cigarettes. The shift to filter cigarettes in recent years has been a major factor in reducing the tobacco required for manufacturing a given number of cigarettes. The average quantity of leaf tobacco required to manufacture 1,000 cigarettes declined from 2.885 pounds in 1945-49 to 2.256 pounds in 1963.

The marketing bill for cigarettes (not including excise taxes) increased about 5 percent from 1962 to 1963 as a result of increased volume and rising marketing charges per unit. The manufacturers' share of U. S. consumers' expenditures for cigarettes increased to 24.6 percent in 1963 from 24.0 percent in 1962. The distributors' share of domestic consumer expenditures declined to 20.3 percent in 1963 from 20.7 percent in 1962, continuing a downward trend begun in 1959.

The Federal excise tax for the past 12 years has been \$4 per thousand cigarettes weighing 3 pounds or less. This weight category includes practically all domestically produced and consumed cigarettes. The percentage of consumer cigarette expenditures going for Federal excise taxes, therefore, has declined as the price of cigarettes has increased. Federal excise taxes in 1963 accounted for 28.7 percent of consumer expenditures for cigarettes, down 0.4 percentage point from 1962. State and local



excise taxes continued to increase, rising to 17.0 percent of consumer expenditures in 1963 from 16.2 percent in 1962.

### Cotton and Wool

Farm=retail spread for cotton.--The spread between the retail cost of representative cotton clothing and housefurnishings and the farm value of lint cotton used in their manufacture increased for the second consecutive year in 1964. The retail cost in 1964 of these items, equivalent to 1 pound of lint cotton, averaged \$2.17, the same as in 1963. The 1964 farm value of 1 pound of lint cotton averaged 31 cents, down 1 and 2 cents from comparable averages for 1963 and 1962 respectively. Thus, the farm=retail spread increased to \$1.86 in 1964 from \$1.85 in 1963. As a result, the farmer's share of the consumer's cotton dollar averaged 14 percent in 1964, compared with 15 percent in the 2 preceding years and with the high of 18 percent in 1951 and 1952.

The share of the consumer's dollar going to marketing, processing, fabrication, and distribution of finished cotton items increased from 85 percent in 1962 and 1963 to 86 percent in 1964. This share is greater if allowance is made for the 6.5 cent equalization payment made by the Federal Government that began in April 1964.

Where the consumer's cotton dollar goes.--In 1962, the last year for which detailed estimates are available, about 42 percent of the consumer's dollar for the 25 cotton items was for manufacturing, about 41 percent for wholesaling and retailing combined, and 2 percent for merchandising raw cotton (figure 15). Preliminary information indicates that the proportion for merchandising cotton has not changed appreciably in the past several years. Thus, the increase in the total marketing charge in 1964 was mainly in manufacturing and distributing functions.

Combined salaries and wages accounted for 49 percent of the consumer's cotton dollar in 1962, compared with 44 percent in 1947. Preliminary reports indicate that labor costs accounted for a larger proportion in 1964, since wage rates have continued to rise at almost all stages of the cotton marketing system. Improvements in output per man-hour, however, probably kept labor costs per unit of product from rising as much as wage rates. In 1964, hourly earnings of textile mill employees were estimated at \$1.78, compared to \$1.68 in 1962 and about \$1.12 in 1947-49. Hourly earnings for employees in the apparel industry averaged \$1.79 in 1964, compared with \$1.69 in 1962, and \$1.20 in 1947-49. Earnings of employees in retail apparel stores averaged \$1.63 per hour in 1964, up from \$1.55 in 1962, and \$1.02 in 1947-49.

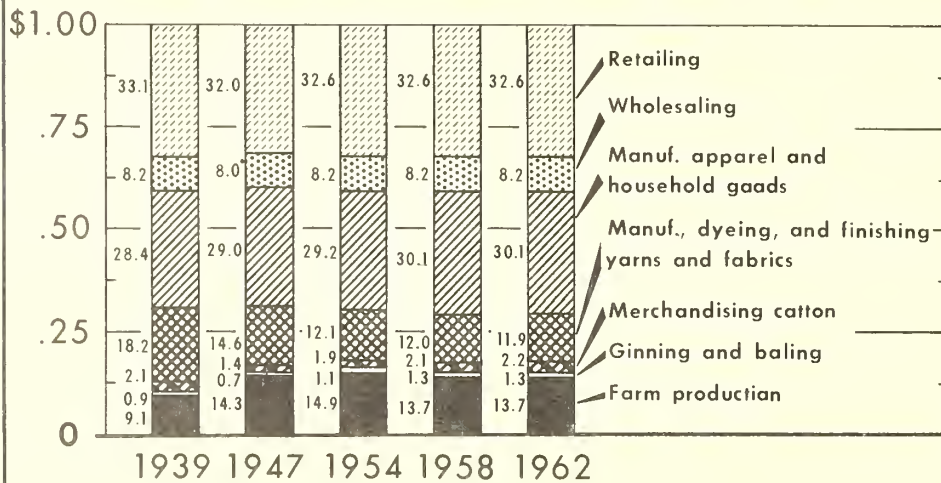
Distribution of the wool dollar.--Based on preliminary data for 1964, the percentage distribution of the consumer's wool dollar for 20 wool products approximated the distribution in 1962 (figure 16). About 72 percent of the retail dollar was for manufacturing, wholesaling, and retailing these items, and about 16 to 17 percent for merchandising raw wool and for manufacturing, dyeing, and finishing yarns and fabrics. These percentages are very similar to those for cotton.

Profits of textile firms.--Profit margins of textile mills, like total mill margins, have recently widened and are currently at the best rate since 1959. Earnings gains in excess of 25 percent in 1964 are indicated for a large number of textile mills. The profits uptrend during 1964 reflects a substantial gain in sales as well as a reduction in raw material costs.

Where it Goes

# THE CONSUMER'S COTTON DOLLAR, BY OPERATIONS OR SERVICES

*Paid for Apparel and Household Goods, Selected Years*



BASED ON OFFICIAL AND OTHER DATA, AND PARTLY ESTIMATED.

U. S. DEPARTMENT OF AGRICULTURE

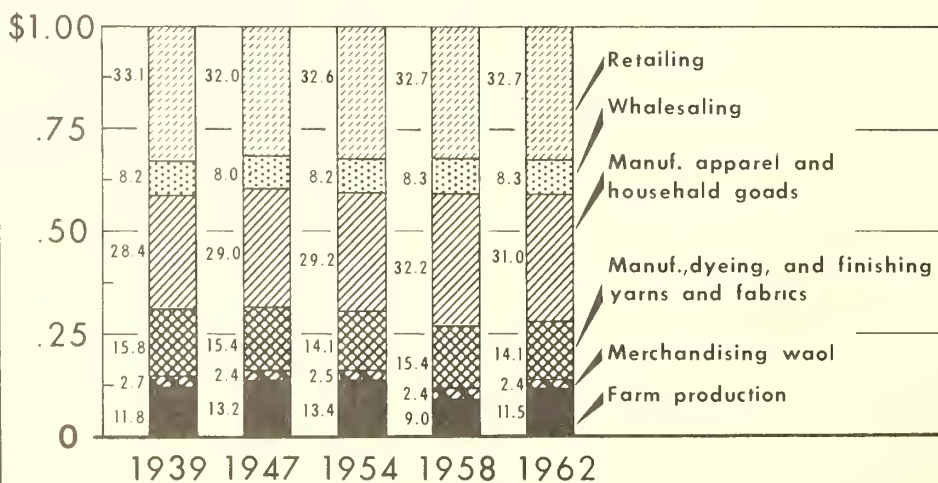
NEG. ERS 2765-64 (4) ECONOMIC RESEARCH SERVICE

Figure 15

Where it Goes

# THE CONSUMER'S WOOL DOLLAR, BY OPERATIONS OR SERVICES

*Paid for Apparel and Household Goods, Selected Years*



BASED ON OFFICIAL AND OTHER DATA, AND PARTLY ESTIMATED.

U. S. DEPARTMENT OF AGRICULTURE

NEG. ERS 2769-64 (4) ECONOMIC RESEARCH SERVICE

Figure 16

Profits (after taxes) as a percentage of sales started up during the second quarter of 1964 and increased sharply in the third quarter. Profits as a percentage of sales during the 10-year period 1954-63 fluctuated closely around the average of 2.2 percent. The quarterly adjusted annual rates for the first 9 months of 1964 were 2.3, 2.7, 3.7 percent, respectively. Fourth quarter data are not available, but a continuation of the current favorable profit position through mid-1965 is forecast by market analysts.

Expenditures for plant and equipment.--Expenditures for plant and equipment by the textile mill industry have increased steadily since 1958. Particularly sharp increases were made during the last half of 1964, and even greater outlays are estimated during 1965. After large capital outlays for plant and equipment by the textile mill industry following World War II, such expenditures declined rapidly; and in 1958, they totaled only \$288 million, less than 60 percent of the 1949-51 average. By mid-1964 the outlays had reached an annual rate of \$650 million. The seasonally adjusted annual rate of expenditures jumped to \$800 million in the third quarter 1964 and then to \$950 million in the fourth quarter. Textile mill operators have estimated that expenditures will total about \$1 billion in 1965. Their estimated 1965 expenditures are more than double the 1949-51 average and 3.5 times more than in 1958. Industry reports indicate that larger plant and equipment expenditures by textile mills may be expected in view of recent improvements in machine technology, liberalization of depreciation allowances, and improved earnings.

#### MARGINS AND COSTS PUBLICATIONS ISSUED, FEBRUARY 1964 - FEBRUARY 1965

##### Publications of the Economic Research Service, USDA

Prices and Spreads for Fresh Fruits and Vegetables Sold in Selected Markets, 1956-62. Stat. Bull. 340. Feb. 1964.

Operating Costs in Packing Mixed Feeds with Emphasis on Labor and Capital. Mktg. Res. Rpt. 658. May 1964.

Developments in Marketing Spreads for Agricultural Products in 1963. ERS-14 (1964). August 1964.

Spreads in Farm-Retail Prices of White Bread. Misc. Pub. 969. Sept. 1964.

Flexibility of Operation in Dairy Manufacturing Plants: Changes 1944 to 1961. Agr. Econ. Rpt. 61. Oct. 1964.

The American Textile Industry: Competition, Structure, Facilities, Costs. Agr. Econ. Rpt. 58. Nov. 1964.

Price Spreads for Beef. Misc. Pub. 992. Feb. 1965.

Charges for Ginning Cotton, Costs of Selected Services Incident to Marketing and Related Information, Season 1963-64. ERS-2. Annual.

Marketing and Transportation Situation. Quarterly.

Milk Distributors Sales and Costs. Quarterly.



### State Publications

Impact of Seasonality of Milk Supplies on Labor Costs and Efficiency in Dairy Manufacturing Plants. Purdue Univ. Res. Bull. 774. March 1964.

Selected Operating Costs for Storage of Sorghum Grain. Texas Agr. Expt. Sta. Bull. 1009. April 1964.

Marketing New England Poultry. 6. Economies of Scale in Hatching and Cost of Distributing Broiler Chicks. N. H. Agr. Expt. Sta. Bull. 483. May 1964.

Marketing New England Poultry. 8. Effects of Firm Size and Production Density on Spatial Costs for an Integrated Broiler Marketing Firm. N. H. Agr. Expt. Sta. Bull. 485. Nov. 1964.

### Articles in USDA Periodicals

#### Agricultural Situation:

Farm-Retail Price Spread Steady in First Quarter of This Year. June 1964.

#### The Farm Index:

Food Prices and Why. Reprinted as ERS-199. August 1964.

#### Marketing and Transportation Situation:

Price Spreads for Beef. May 1964. Reprinted as ERS-182.

Employment in Marketing Consumer Products of Farm Origin. August 1964  
Reprinted as ERS-192.

The Bill for Marketing Farm Products. August 1964. Reprinted as ERS-20 (1964).

Retail Beef Price Specials. November 1964. Reprinted as ERS-208.

Marketing Spreads for Beef, Pork and Lamb. Feb. 1965. Reprinted as ERS-104.

Marketing Spreads for Dairy Products. Feb. 1965. Reprinted as ERS-220.

Marketing Spreads for Eggs, Frying Chickens, and Turkeys in Selected Cities of the United States. Feb. 1965. Reprinted as ERS-159.

Marketing Spreads for Leather Products. Feb. 1965. Reprinted as ERS-221.

Output Per Man-Hour in Food Manufacturing. Feb. 1965. Reprinted as ERS-222.

### OTHER DISSEMINATION OF PRICE SPREAD INFORMATION, FEBRUARY 1964 - FEBRUARY 1965

#### Speeches and Papers

Economics of Potato Utilization. Speech presented at the 14th National Potato Utilization Conference, July 1964.

Variations in Food Prices. Speech before 42nd Annual Agricultural Outlook Conference, November 1964.

The Economics of a Loaf of Bread: From the Farm to the Consumer. Speech presented at Third National Wheat Utilization Research Conference, November 1964.



Farm-Retail Spreads for Fruits and Vegetables. 1965 Yearbook, United Fresh Fruit and Vegetable Association.

### Periodicals

The Farm Index. Monthly.

In each issue there are sections on marketing and the consumer which summarize in short articles and notes materials from research on price spreads of special interest to these groups.

Service, UDSA's Report to Consumers.

Service is a monthly newsletter of consumer interest which is designed for those who report to the individual consumer, rather than for mass distribution. It also carries items on costs and new marketing developments of special interest to consumers.

### Radio Presentations

Statement-Marketing and Transportation

Statement-Milk in Alaska

Statement-Consumer Story

Statement-Where the Food Dollar Goes

Interview-Food Prices

### Television

Interview-Family Marketing

Interview-Food Is a Bargain

Statement- The Consumer's Story

Statement-Greensboro Pricing Study

Interview-Variations in Food Prices

### Exhibits

Food Is a Bargain at Food and Home Fair, USDA

UNITED STATES DEPARTMENT OF AGRICULTURE  
WASHINGTON, D.C. 20250

POSTAGE AND FEES PAID  
U.S. DEPARTMENT OF AGRICULTURE

---

OFFICIAL BUSINESS





